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SCHOOL ORGANIZATIONAL CLIMATE AND TEACHER  
CLASSROOM BEHAVIOR

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "School Organizational Climate and Teacher Classroom Behavior" submitted by Ray Francis Ethelred Harvey in partial fulfilment of the requirements of the degree of Doctor of Philosophy.





## ABSTRACT

In any institution various social systems are developed as groups of individuals undertake the major functions aimed at achievement of its goals. Theory suggests that in these systems individual behavior and interpersonal perception are strongly affected by the group climate which develops as members strive for congruence between institutional role expectations and personal need-dispositions.

The teacher is a member of both his classroom social system and the faculty social system of the school. This study was designed to test the general hypothesis that there is concomitancy of variation between the organizational climate of the school's faculty social system and the classroom behavior of the teacher. The teacher's membership in both groups was seen as resulting in organizational climate influence on his classroom behavior and classroom influence on his perceptions of faculty interaction.

The study was conducted in a sample of forty Saskatchewan elementary schools. School superintendents, using Ryans' Classroom Observation Record, obtained measures of three patterns of the classroom behavior of 374 teachers. Administration of Halpin and Croft's Organizational Climate Description Questionnaire yielded two measures of openness of climate and scores for eight climate dimensions for each school.

No significant concomitancy of variation between climate and behavior patterns was revealed, but there was indication that more accurate measurement of classroom behavior would have resulted in



significant relationship between climate and teacher behavior Pattern Yo, described as responsible, business-like, systematic vs. unplanned, slipshod. This indication was supported by a significant relationship between the climate dimension Disengagement and the same pattern, and again between that pattern and teachers' perception of the dimension Aloofness. It appeared that principal influence on climate in the sample schools was somewhat less than might be expected.

Examination of relationships between faculty biographical variables and organizational climate revealed significant direct relationship between the principal's period of service in a school and its climate. There was a direct relationship between principals' training and those dimensions of climate indicating directive supervision.

Teachers' age, experience, and period of service in a school were found to be directly related to classroom behavior Pattern Yo, but there was little indication that training was related to any behavior pattern. Male teachers appeared to rate higher on Pattern Yo than female teachers did.

Though no significant concomitancy of variation between climate and any pattern of teacher classroom behavior was demonstrated, there was limited evidence for concluding that the relationship may exist for Pattern Yo. It was concluded that the principal's influence on openness of climate increases with his period of service in the school. Male teachers and teachers who are older, more experienced, and have been longer in the present school may be expected to be rated higher on classroom behavior described as responsible, business-like, and systematic.





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## CHAPTER I

### THE PROBLEM

#### I. INTRODUCTION

A prime function of school administration is to so order the elements of a school system that the best possible teaching-learning situation results. Central to this function is, of course, the recruitment, placement, and retention of effective classroom teachers. But as soon as administrators in the field or research workers in education concern themselves with teacher effectiveness, they find themselves caught up in the vexing twin problems of what constitutes teacher effectiveness and how it can be measured. The experimenter gains greatest satisfaction in terms of demonstrable results if he seizes upon some objective measure of teacher effectiveness, such as examination results, and relates his teacher or faculty variables to this. Satisfying and useful as this "criterion-of-effectiveness" paradigm is, it leaves rather completely unanswered the somewhat more challenging problem of how such teacher or faculty variables induce the measured change--always assuming that this change is indeed a true measure of what society wishes its schools to effect. One thing is clear:

Both lay public and professional educators generally agree that the "goodness" of an educational program is determined to a large extent by the teaching. The identification of qualified and able teaching personnel, therefore, constitutes one of the most important of educational concerns. (11, p. 1)





Ackerman (1) reported on some thirty studies in which age, experience, intelligence, professional knowledge and training, and several other variables are related to competence. He concluded that teachers possess not one but many competencies, and that any effort to relate isolated ones to pupil change without cognizance of others is futile. Every teacher employs his own unique combination of competencies in his classroom interaction with his pupils.

The observation of classroom behavior becomes, therefore, a crucial step in the entire process. It is perhaps the only valid appraisal of teacher factors that can be made. . . .

The most complete picture of the teaching process would be to predict from antecedent conditions to classroom behavior and in turn from behavior to the effect on pupils. Usually the middle step has been omitted. (1, p. 286)

Ackerman's contention finds strong support in the reports of the Remmers Committee (9, 10). They speak of "teacher effectivenesses" rather than teacher effectiveness, and they emphasize the importance of observing the teacher in action in the classroom in order to understand these (10, p. 652). They explain that:

The same "teaching method" may be more effective when employed by a "warm and kindly" teacher than when employed by the "business-like" teacher. (10, p. 653)

In this study an attempt was made to assess Ackerman's "middle step"--teacher behavior in the classroom. The assumption was that if the school is to play its full part in the child's acquisition of the knowledge, skills, attitudes, habits, and moral values, which are usually embodied in parental expectations, this will take place largely as a result of appropriate teacher classroom behavior.





One of the "antecedent conditions" to teacher classroom behavior is certainly the teacher's membership in the faculty social system (1, p. 286). As educational administration--and more particularly the function of supervision--has developed, practitioners and research workers have become more and more impressed with the effects on teacher performance of human interaction at other levels as well as that of the classroom. This awareness has developed partly as a result of the sensitivity of practitioners themselves, but also to a very considerable extent as a result of the growth of a considerable body of theory of educational administration as an applied behavioral science. The social science disciplines have contributed generously to this development, none more than social psychology. Theory in administration is becoming increasingly influenced by the notion of an emergent evolutionary property of human behavior, not latent in any individual personality, which makes itself evident in the operation of a social system.

Downey and Enns, speaking of the decision making responsibilities of the administrator, conclude:

. . . predictions as to the outcomes of action grow out of one's knowledge of the forces which constitute the setting in which administrative action takes place.

Most of these sources are social in character. Organizations consist of people, functioning both as individuals and as groups, and activated by all the complexities of human motivation. Decisions are implemented, tasks performed, and goals achieved only through and with the people who are, in fact, the organization. (3, p. 1)

As awareness of the effects of group membership has more and more permeated administrators' thoughts about organizational structure and the



inter-relation of organizational elements, there has been increased interest in the effects of leadership style, communication, staff morale, and worker satisfaction. Empirical studies, such as Keeler's research (7) into the effects of leadership and morale on productivity and of leadership on morale, have led to the realization that leadership and morale are both complex concepts, and that these and other aspects of human interaction in an organization must be examined together in order to understand fully the effects of social system membership on the achievement of the goals of the organization. The term organizational climate has been devised to encompass this complex of interactional influences.

The foregoing paragraphs have identified the two areas of concern considered in this study: the behavior of the teacher in the classroom which has much to do with what and how children learn, and the faculty interactional influences--the organizational climate of the school--which the teacher experiences.

In the remaining portions of this chapter brief statements are made of the purposes of the study, its importance, its delimitations and limitations, some definitions, the research hypotheses, and finally, the format of the thesis.

## II. PURPOSES OF THE STUDY

Specific mention was made in the introductory paragraphs of the classroom teacher's membership in the faculty social system of his school. As such he is subject to all of the interactional influences which accompany group membership, that is, the organizational climate of the faculty.





But the teacher is also a member of his classroom social system, a very important one, as will be more fully emphasized in the next chapter. The teacher, then, is the human link between the two social systems; he is the "point of articulation" between the two, to use a Talcott Parsons term slightly out of context (8, p. 44). The question which became the central problem of this study was, what is the nature and the extent of the overlapping influence of these two social systems on the behavior and the perceptions of the teacher who is a member of both?

### Primary Purposes of the Study

The first purpose of this study was to determine whether there is any measureable relationship between the organizational climate of a school and the classroom behavior of its teachers. Secondly, an effort was made to explore the nature of the hypothesized concomitancy of variation. The third primary purpose was to determine the nature and the extent of concomitancy of variation between the teachers' classroom behavior and their perceptions of elements of the school's organizational climate.

### Secondary Purposes

Though they were not recognized as first order purposes, several subsidiary problems contributed to the development of the design of the study. The instrument used to gather data on teacher classroom behavior provided a test of the applicability of such an instrument to general field use by superintendents. Its use as a self-test instrument by teachers was seen as a means of testing directly the correspondence, or lack of it, between supervisor- and self-appraisal of teacher classroom performance.





The instrument used to measure organizational climate was relatively untried at the time it was selected. A reason for choosing it was to establish its applicability to a Canadian sample and to add validation evidence to that established by its designers.

Finally, to provide a control on extraneous variables, data were gathered on biographical characteristics of participating faculty members. An examination of the relationship of biographical variables to the main variables of the study emerged as a secondary purpose of the study.

### III. IMPORTANCE OF THE STUDY

In the introduction to a discussion of teacher effectiveness, Biddle writes:

The author argues . . . that far too little effort has been put into observing what teachers do, and that relationships between teacher properties<sup>1</sup> and teacher behavior depend upon a classroom, school, and community context. (2, p. 11)

Biddle states the case quite well. It is not enough to demonstrate that a particular contextual circumstance or set of circumstances affect a narrow measure of the output or productivity of a school. If full value in terms of changing or reordering the effects of these circumstances is to be gained, the administrator must also have evidence of the manner in which the contextual variable affects the teaching-learning process to produce the measured output effects.

---

<sup>1</sup>Teacher properties are a teacher's personal characteristics such as habits, motives, knowledge, and skills,



The organizational climate of the school was the set of contextual circumstances with which this study was concerned. It sought to relate climate to patterns of classroom behavior of teachers in the belief that information about this relationship would provide administrators and teachers themselves with some useful insights into this "middle step" (1). Since organizational climate is a product of faculty interaction, knowledge of the relationship between climate and teacher behavior can provide valuable information relative to selection, placement, and in-service education of both teachers and principals.

Does the understanding, friendly teacher work more effectively and more happily in a school in which the principal is considerate? Alternatively, does such a teacher operate to the best advantage under a principal who is universalistic in his attitudes to staff, directive in his supervisory activities, and generally strongly task oriented? Is a school climate in which leadership acts emerge easily from all faculty members associated with more systematic and responsible classroom behavior by teachers? Can one assume that high staff morale and conscientious effort by the principal to motivate staff will be effective in eliminating dull, routine teacher classroom behavior? Will the "successful" teacher perceive faculty interaction in a more favorable light than the teacher whose classroom performance is judged to be less effective?

This study was designed to take the first steps toward answering such questions. Both pre-service training schools for teachers and graduate schools for the education of administrators as well as practicing administrators can profit from an extension of knowledge in this field.





#### IV. DELIMITATIONS OF THE STUDY

The population for the study was a portion of the elementary schools of the Province of Saskatchewan. The sample was chosen largely on the basis of the consent of the participants, though a satisfactory representation was achieved.

Data on teacher classroom behavior were obtained through the use of a classroom observation record by superintendents of schools. Independent observation by two superintendents yielded data from which scores on three patterns of teacher behavior were obtained for each teacher.

An organizational climate questionnaire was completed by each faculty member to provide the basis for deriving measures of school organizational climate. The scoring procedures permitted the description of each school's climate in terms of one of six categories on an openness of climate continuum ranging from Open Climate to Closed Climate. In addition the questionnaire subtests provided scores for eight dimensions or elements of climate as perceived by the participating faculty members.

#### V. LIMITATIONS OF THE STUDY

Both instruments used in the study are relatively new. A rather full discussion of their reliability and validity is included in Chapter III. A potential major source of loss of accuracy of data lay in the necessity to use a relatively large number of raters of teacher classroom behavior. Reliability and validity were dependent on rater judgment. Efforts made to minimize this source of error are described in Chapter V.





Both major variables are complex and difficult to measure. Both instruments have at least a partially taxonomic derivation; both are relatively untried; and both depend on interpersonal perception for their completion. Cognizance of these facts made the investigator aware of a rather high risk level relative to obtaining decisive indicators of hypothesized relationships. Confidence in the ability and judgment of the raters to be used and in the precautions planned to control extraneous variables led to the decision to proceed with the exploration.

A somewhat unusual limitation must be added. This study was planned in the winter of 1962-63 and the data were gathered in the early spring of 1963. More than two years elapsed before the data were processed and analysed and the reporting undertaken. The study was planned and carried out immediately after the instrument used to measure organizational climate became available. One of the reasons for undertaking the study was to make a first exploratory probe into a field made capable of study by this instrument. The study has lost some of its value for other researchers through this lapse of time, since a number of other investigators have made use of the instrument in the interval. Had it been known that this report would not appear soon after the advent of the instrument, the study might well have been extended by the introduction into the design of a measure of school productivity. This would have permitted an examination of not only an antecedent-middle-step phase of teaching relationships but also the middle-step-consequent phase. Thus some cause-effect conclusions might have been drawn.



## VI. DEFINITIONS

For the purposes of this study the following definitions are required.

Faculty. A school faculty is made up of the principal and all instructional staff members.

Staff. The term staff is applied to the teacher group exclusive of the principal.

Social System. A social system is a social group in interaction (5, p. 152). It is a conceptual rather than a descriptive term. While social systems, as here defined, may vary in size, they are not to be confused with society or state or other such large aggregations. The classroom group and the faculty group are social systems within a school, which may itself be viewed as a social system.

Teacher Classroom Behavior. Teacher classroom behavior refers to the behavior or activities of teachers as they go about doing what is required of teachers in the classroom, particularly those activities which are concerned with the guidance or direction of the learnings of others. In this study teacher classroom behavior means the behavior of the teacher in the classroom social system.

Patterns of Teacher Classroom Behavior. Patterns of teacher classroom behavior are identifiable and reasonably stable configurations of attitudes and activities of teachers in interaction with their students in the teaching-learning situation. The patterns employed in this study were those identified by Ryans in his Teacher Characteristics study (11, p. 77).







Organizational Climate. Organizational climate may be defined as the totality of the interactional influences generated in the faculty social system of a school. For this study Halpin and Croft's delimitation of organizational climate was accepted (6).

Dimensions of Organizational Climate. Dimensions of organizational climate are elements of the totality of interactional influences identifiable as restricted and definable patterns of attitudes and behavior of either principals or staff members in faculty interaction. The dimensions of organizational climate used in this study were those defined by Halpin and Croft in their Organizational Climate study (6).

## VII. HYPOTHESES

The research hypotheses for the study may be stated as follows.

Hypothesis One. Organizational climate in schools is related to patterns of teacher classroom behavior.

Hypothesis Two. Dimensions of school organizational climate are related to mean pattern scores of teacher classroom behavior for the schools.

Hypothesis Three. Teachers' perceptions of the dimensions of organizational climate in their schools are related to their ratings on patterns of classroom behavior.

## VIII. ORGANIZATION OF THE THESIS

The next chapter presents a reasonably full examination of the theoretical bases of the study. A discussion of the instrumentation of the study is contained in Chapter III. Chapter IV contains a brief



over-view of research literature related to the two areas of school operation which enter into the study. The following chapter is devoted to a description of the population, the sample, the procedures employed in training classroom observers, and the methods of data collection. In Chapter VI the analysis of data is reported. Chapter VII is devoted to a report of hypotheses testing and discussion of findings. A sub-study on the relationships between biographical data gathered and the main study variables is reported in Chapter VIII. The final chapter of the report provides a summary of the study, general conclusions, and an indication of the implications of the findings for the practice of administration and for further research,





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## CHAPTER II

### A THEORETICAL FRAMEWORK

The purposes of the study have been outlined and the research hypotheses stated. In this chapter a theoretical framework for the study is developed.

#### The Biddle Model

Reference has already been made to Biddle's conviction that one must take into account teacher properties, which include all aspects of personality, and contextual circumstances if one is to understand teachers' classroom behavior and reach logical conclusions regarding the consequences of that behavior. Actually Biddle presents a seven-variable-class model for the analysis of teacher effectiveness (1, p. 7). The model, reproduced in Figure 1, suggests five main sequence variables: formative experiences, teacher properties, teacher behaviors, immediate effects, and long-term consequences. Each one in the series can affect the succeeding one in a cause-effect relationship. But interacting with these are two contextual variables, classroom situations and school-community contexts, which impinge upon the teacher's personality, his classroom behavior, and hence on the effects of his teaching.



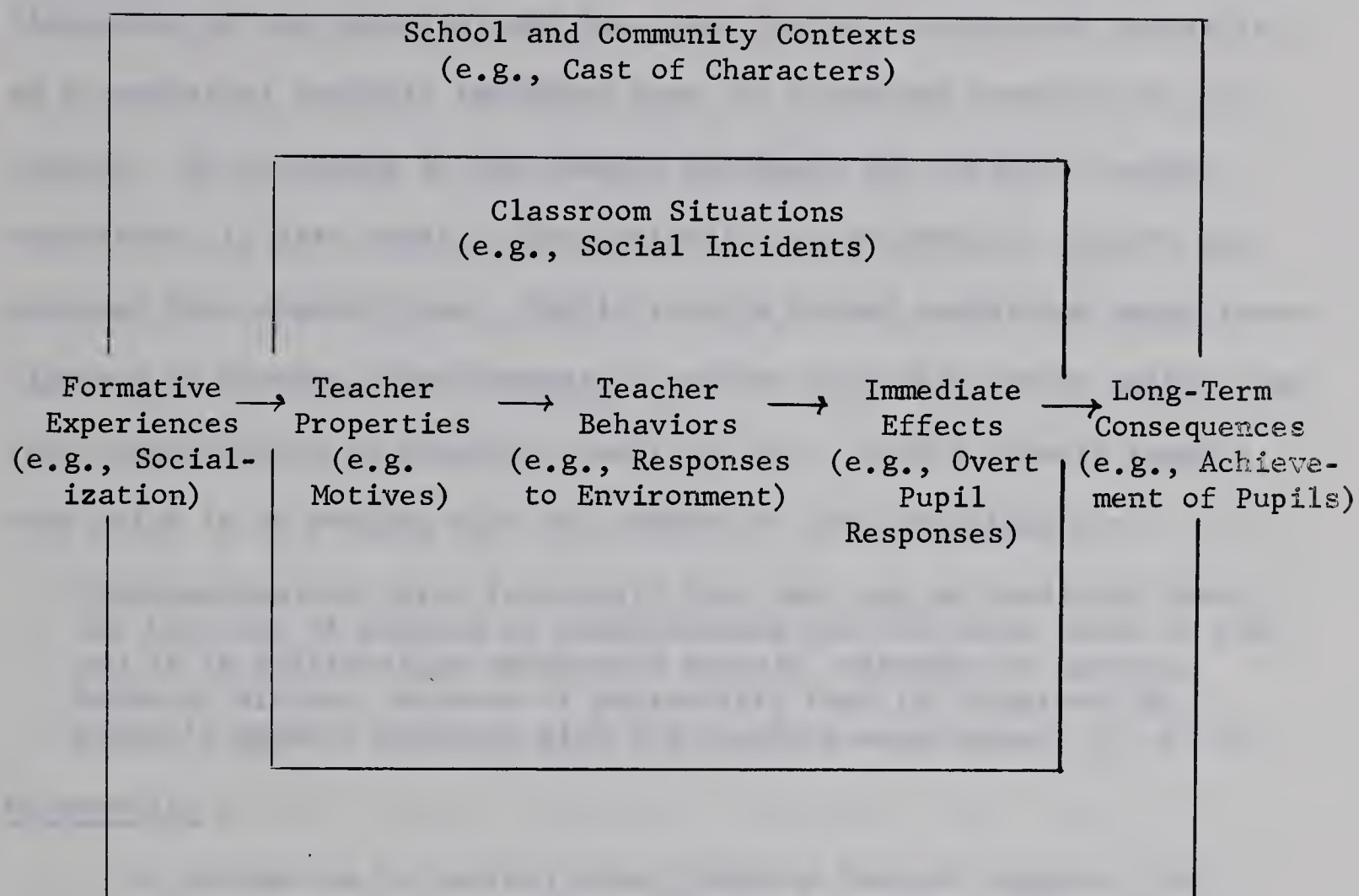


FIGURE 1

A SEVEN-VARIABLE-CLASS MODEL FOR TEACHER EFFECTIVENESS<sup>1</sup>

In essence, the teacher's classroom behavior is mediational between the antecedent variables, formative experience and teacher properties, and the consequent variables, immediate effects and long-term consequences, but that behavior, and hence the whole cause-effect sequence, is subject to the influence of the two contextual variables.

The model serves to place the variables of the present study in one important perspective--a teacher effectiveness perspective. It suggests identification of school organizational climate, including the

<sup>1</sup>Adapted from 1, p. 7.





leadership of the principal and the total faculty interaction generally, as a contextual variable impinging upon the classroom behavior of the teacher. By including in the central rectangle the variable teacher properties, it also tends to draw attention to personality factors and personal need-dispositions. Biddle reports strong opposition among investigators of teacher effectiveness to concern with this factor rather than full concentration on behavior itself (p. 11). Biddle himself takes a view which is in keeping with the concern of this investigator:

Phenomenologists argue forcefully that more can be predicted about the behavior of someone by understanding how the world looks to him; and it is difficult to understand archaic, mistaken or neurotic behavior without concepts of personality that tie together the person's present behavior with his previous experiences. (1, p. 11)

### Personality

In attempting to explain human behavior Newcomb suggests the relationship illustrated in Figure 2 (9, p. 31).

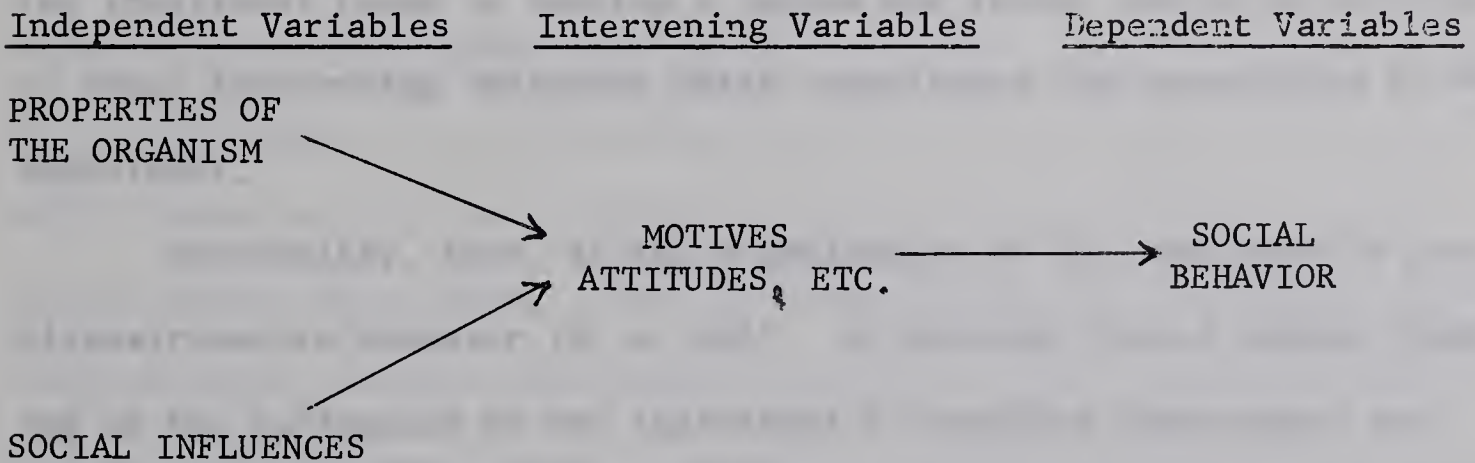


FIGURE 2

RELATIONSHIPS AMONG THE THREE KINDS OF VARIABLES



In this model properties of the organism are physiological or inherited properties such as color of skin, physique, and nervous control system. Such properties of the organism are relatively stable. After careful observation, even non-physical ones such as intellectual capacity and temperament can be fairly accurately categorized. Social influences, while much less stable, are capable of systematic study. Sociology has contributed extensive knowledge of group relationships and role patterning within groups. Both the properties of the individual and the social influences bearing upon him from birth are determinants of behavior, but no consideration of either or both of these is sufficient to explain resultant behavior unless cognizance is taken of the mediating effects of the individual's motives, attitudes, and needs. These can and do change; they are affected by group membership at any stage in the life of the individual; but fortunately for the observer of human behavior, the individual tends to develop a unique and fairly stable patterning of these intervening variables which constitutes the personality of the individual.

Personality, then, is the organization of the individual's pre-dispositions to behavior (9, p. 345). It develops from a unique blending of the influences of the individual's inherited temperament and capacities with the complex of the cultural influences operative through the family, the school, peer groups, and other informal or institutionalized groups of which the individual is a part, especially through the years of childhood. Throughout this learning process there is a continuing adjustment to cultural pressures of the individual's attempts to satisfy his personal needs. As the perceptual or phenomenological





psychologists state it, one strives constantly to achieve adequacy of self-concept, to enhance self, to avoid threat to self. Every situation is perceived selectively in terms of its relation to the self-concept.

. . . whenever we refer to man's basic need, we mean that great driving, striving force in each of us by which we are continually seeking to make ourselves ever more adequate to cope with life.  
(3, p. 46)

An understanding of such relationships makes much of human behavior more meaningful. Observation of an individual over time enables one to form opinions regarding his personality and to develop a basis for predicting his behavior in various circumstances.

### Group Membership

Before presenting the theoretical model which was chosen as a framework for examining the problem of this study, it appears logical to turn from the foregoing emphasis on the influence of the personality determinant of human behavior to a brief examination of the effects of group membership on human behavior.

The Group. A social group consists of two or more persons who share norms about certain things and whose social roles are closely interlocking (9, p. 492). Norms are common frames of reference--perceptual contexts, or ways of looking at things. This sharing makes interaction meaningful and permits communication among members of the group. A group is made up of positions to be filled. The way of behaving of the occupant of a position is a role. The behavior expected by other group members of the individual filling a position is the role prescription. Role prescriptions are part of the norms of the group; they make communication in the group easier by providing a whole configuration of





interlocking sets of behavior expectations.

. . . people behave as they do partly because of their particular locations in a differentiated group, and groups perform as they do partly because of the particular type of internal structure they possess. (2, p. 600)

A great number and variety of studies, such as those of Roethlisberger and Dickson, Thrasher, Whyte, Zorbaugh, Sherif, Asch, and Newcomb (as quoted in 2, pp. 165-186), have demonstrated how the individual's judgment is affected by group standards. The influence of the group on the individual is a function of: (1) the salience of the group for him, (2) the achievements and clarity of goals of the group, (3) the cohesiveness of the group, a quality which is circularly related with the satisfaction the member derives from membership, (4) the individual's perception of the certainty and nature of sanctions by the group for non-compliance, and (5) the individual's own self-confidence. (2).

Formal Organization and the Group. Formal organization attempts to impose a set of role prescriptions on the group, prescriptions aimed at the achievement of the goals of the organization. And yet,

In formal organization it is not organization alone which sets up expectations for its members. The members set up expectations for each other, and for the organization as a whole . . . . The rules and regulations of formal organization attempt to define the patterns of reciprocal behavior of its members, for such definitions form the basis for organizational stability. These patterns comprise a system which is expected to function so that the organization's goals may be achieved. Formal organization, however, cannot establish all patterns of behavior. Informal arrangements are therefore contrived where definitions are not provided by the formal structure or where the formal definitions are not satisfactory to the members. (12, pp. 4, 5)

The patterning of interaction in a work group will not be exactly what management expects it to be, but there is little doubt that the norms





of the work group are an extremely important frame of reference for the individual. As Hughes states it,

A man's work is one of the more important parts of his social identity, of his self, indeed of his fate in the one life he has to live for there is something almost as irrevocable about choice of occupation as there is about choice of mate. (as quoted in 12, p. 5)

### The Getzels Model

The Biddle model (2) has provided convenient structure for a brief preliminary examination of social behavior determinants in a work group context. However, it was the work of Getzels and Guba (4) and Getzels and Thelen (5) which provided the chief theoretical guide in the formulation of this study.

The General Model. Getzels (4), under strong influence of the theories of Talcott Parsons (10), has constructed a conceptual model of human behavior in institutionalized situations which can readily be applied to help explain individual behavior and personnel relationships in almost any school or school system. Figure 3 depicts the general model.

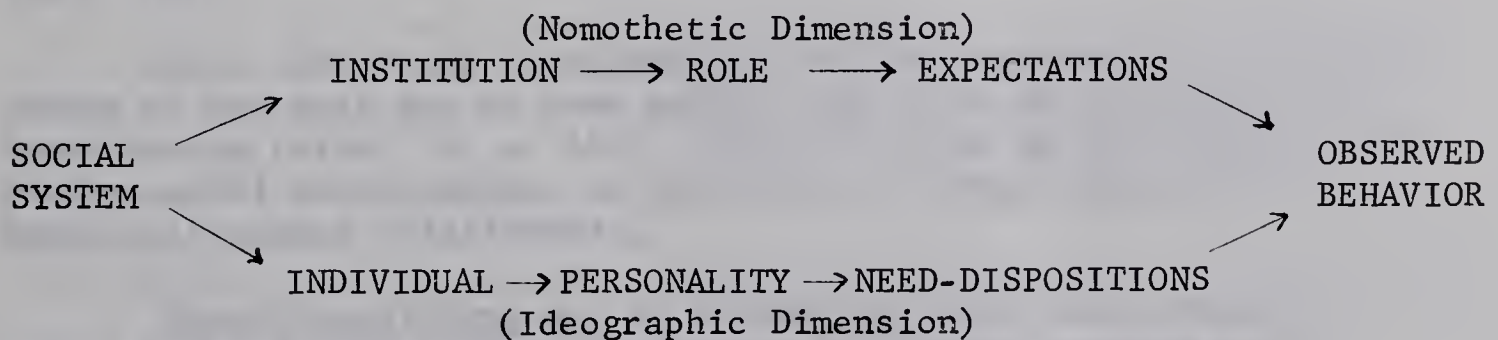


FIGURE 3

THE NOMOTHETIC AND IDEOGRAPHIC DIMENSIONS  
OF SOCIAL BEHAVIOR (4, p. 156)





Getzels states:

We conceive of the social system as involving two classes of phenomena which are at once conceptually independent and phenomenally interactive. There are first the institutions<sup>2</sup> with certain roles<sup>3</sup> and expectations<sup>4</sup> that will fulfil the goals of the system. And there are second the individuals with certain personalities and need-dispositions<sup>5</sup> inhabiting the system where observed interactions comprise what we generally call "social behavior." We shall assert that this social behavior may be understood as a function of these major elements: institution, role, and expectations which together constitute what we shall call the nomothetic or normative dimension of activity in a social system; and individual, personality, and need-dispositions, which together constitute the ideographic or personal dimension of activity in a social system. (4, p. 152)

The behavior of an individual in a social system is a function of his role and his personal need-dispositions. Getzels expresses it

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<sup>2</sup>Institutions are agencies which have grown up to carry out certain imperative social functions in more or less routinized ways. (4, pp. 152-3)

<sup>3</sup>Roles are the dynamic aspects of positions, offices, or statuses held by individuals in the institution. Roles define the behavior of role incumbents. (4, p. 153)

<sup>4</sup>Roles are defined in terms of role expectations; these are the normative obligations and responsibilities of the incumbents. (4, p. 153)

Note: Roles are complementary and interdependent; the expectations of one role may to some extent also form the sanctions for interlocking roles. (4, p. 153) Certainly this is applicable to the teacher-pupil relationship; it is true to a lesser extent of the principal-teacher relationship.

<sup>5</sup>Need-Dispositions may be defined as individual tendencies to orient and act with respect to objects in certain manners and to expect certain consequences from these actions. (4, p. 154)



in equation form,  $B=f(R \times P)$ , and illustrates it graphically as in Figure 4.

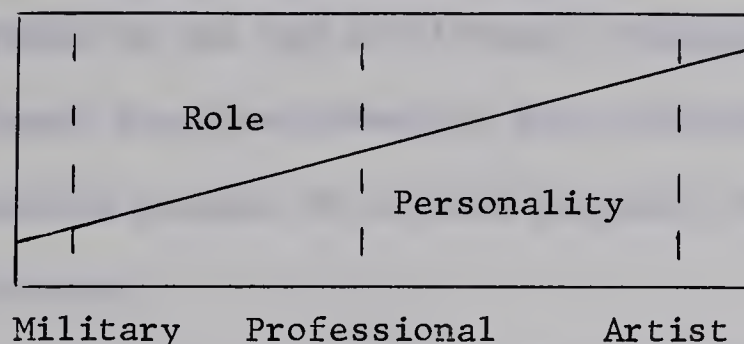


FIGURE 4

THE INTERPLAY BETWEEN ROLE AND PERSONALITY  
IN A BEHAVIORAL ACT (4, p. 158)

The specific illustration indicated by the diagram could be explained thus: the military man's behavior is likely to be more nomothetic (role or task oriented) than the artist's because of the clearly defined and rigidly impressed institutional aspects of military relationships. Comparatively little leeway exists for fulfillment of personal need-dispositions which are not congruent with the institutional expectations. At the other extreme the artist's acts are almost entirely a function of his personality. One would expect to find the behavior of teachers and principals ranging somewhere between these two extremes. Institutional role expectations are clearly operative, but there is opportunity for personal need-dispositions to find expression.

It should be noted that Getzels' behavior equation suggests the possibility of two kinds of conflict, the one personal, the other interpersonal. If the individual's role expectations are so





incompatible with his need-dispositions that satisfactory compromise cannot be achieved, one or the other will be short-changed. One can speculate that the extremes in the way of ultimate consequences for a teacher would be his dismissal for unsatisfactory goal achievement, or alternatively, his resignation because of extreme personal dissatisfaction with the total work situation.

The interpersonal type of conflict would result when there is lack of congruence of the selective interpersonal perceptions of individuals occupying interlocking roles. Of this type of conflict Miklos comments:

If the degree of overlap between the expectations held by incumbents is so important, one might well ask why so much of this should be left to chance. Indeed, in formal organizations there are deliberate attempts to outline and to communicate appropriate expectations, but not much is known about ways in which congruence of perceived expectations among role incumbents might be fostered. (8, p. 16)

It is hoped that the present study will assist in providing some of this knowledge relative to the interpersonal perceptions of the school faculty.

The Extended Model. Both types of conflict, their consequences, and the source of clues to their resolution, come into sharper focus if a social psychological dimension is added to the sociological (nomothetic) and psychological (ideographic) dimensions of the basic or general model. Both the school faculty and the school classroom groups are primary, face-to-face social groups. In both the individual's task of reconciling institutional role expectations with personal need-dispositions is worked out in interaction with others who are grappling with their perceptions of the same problems. The group is mediational between the institution and the individual. It permits the development of a consensus about many aspects of the common generalized problem, even though the consensus



itself remains selectively perceived by the individual members. There emerges in the social system a level of expression of intentions, a medium for the development of meaningful norms for individual behavior and interpersonal relations; in short, the interaction within such a primary group establishes a climate of the system. This conceptualization can be diagrammed as in Figure 5.

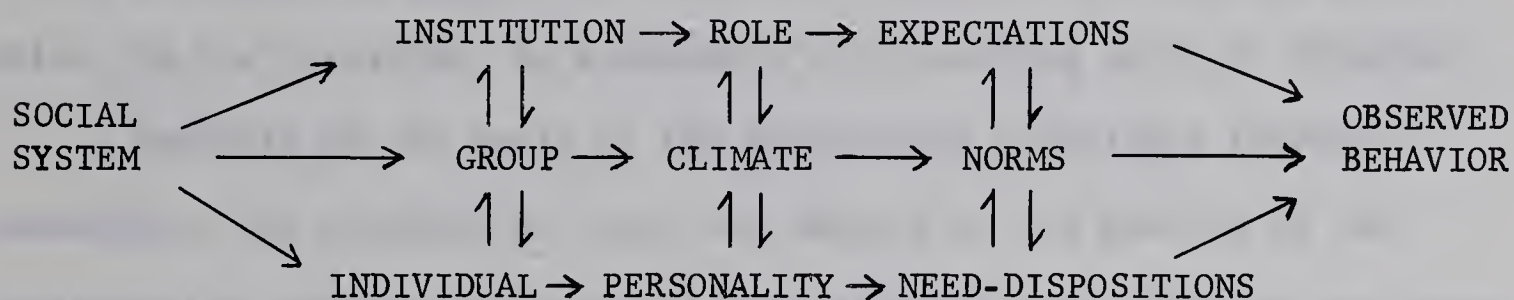


FIGURE 5

THE MEDIATION OF THE GROUP BETWEEN THE NOMOTHETIC AND THE IDEOGRAPHIC DIMENSIONS OF SOCIAL BEHAVIOR (5, p. 80)

In terms of resolution of an individual group member's role-needs conflict, the first type of conflict identified when commenting on the general model, the effect of group interaction and group climate will range from one extreme, socializing the personality, to the other, personalizing the role. The first suggests a marked adaptation of personal need-dispositions to nomothetic role expectations; the second indicates the altering of role expectations under pressure of personal need-dispositions (5, pp. 76, 77).

Leadership Style. Both the faculty social system and the classroom social system in a school will be recognized as groups in which the behavior of the leader is extremely important in establishing the







climate of the system. The principal in the school and the teacher in the classroom are in remarkably strong positions to influence emergent norms. In essence, the central problem of this study is to place their leadership under scrutiny. Aspects of this are elaborated later when a more specific effort is made to apply the model to the problem, but it will be useful at this point to consider in a general way the effects of the influences suggested by the model in terms of leadership style, which, in the classroom, is synonymous with teaching style or behavior.

Emphasis on the goals of the institution highlights technical competence, the pressure of role, and results in the placing in the background of concern for personal need-dispositions. This is the nomothetic leadership style. Here "education is defined as the handing down of what is known to those who do not yet know" (5, p. 77).

At the other extreme, ideographic leadership emphasizes personal need-dispositions rather than role demands. "Education is defined as helping the person know what he wants to know . . ." (5, p. 77). Here systematization is sacrificed to the meaningful relating of individual experiences.

The extremes of each of the foregoing styles of leadership would tend to deny the hypothesized effects of normal group interaction. A much more usual situation is one in which both nomothetic and ideographic influences are operative. Such a transactional style of leadership brings into play the mediating effect of the group in establishing a climate in which judicious balance is established between the personalization of roles and the socialization of personalities. This is not a static balance, but rather "a dynamic transaction between roles and personalities" (5, p. 79).



A glance at the behavior equation  $B=f(R \times P)$  indicates the virtually infinite gradations possible between the  $R=0$  or the  $P=0$  extremes. Actually the balance in any social system changes as a function of continuing group interaction, but a level of belongingness tends to develop for the group members resulting in a climate in which a predictable range of  $R$  and  $P$  variation is set up. Getzels and Thelen comment:

Within this framework, this then might be conceived as the ideal-type model of the classroom as a social system: (a) each individual identifies with the goals of the system so that they become part of his own needs. (b) Each individual believes that the expectations held for him are rational if the goals are to be achieved. (c) He feels that he belongs to a group with similar emotional identifications and rational beliefs. (5, p. 80)

A similar statement could be made relative to the school faculty. To the extent that a staff member feels belongingness, he adopts the norms of the group; he tends to interpret institutional role expectations in a fashion which effects congruence with others including his principal, who, in a sense, is the arbiter of institutional expectations for the school; and his understanding of goals fits into his pattern of need-dispositions.

Organizational Climate. Further reference to the use of the term organizational climate in this study must now be made. Details of the nature of the instrument chosen to measure organizational climate and a full discussion of the terminology involved are provided in Chapter III. The purpose here is to link the term to the Getzels model so that the model may be applied to the problem of the investigation in a meaningful manner.

The organizational climate of this study is nothing more nor less than the "climate" of the Getzels and Thelen model as it applies to the







faculty social system. It has been defined as the totality of the interactional influences generated in the social group made up of principal and staff in a school. The longer term organizational climate was employed in this study because the instrument chosen to measure climate was the Organizational Climate Description Questionnaire (OCDQ) developed by Halpin and Croft (6). It appeared most convenient to adopt their terminology.

There is little doubt of the correspondence referred to. Halpin and Croft state:

The Organizational Climate can be construed as the organizational "personality" of the school; figuratively "personality" is to the individual what "climate" is to the organization. (6, p. 1)

They speak of this "personality" of the school as being what teachers and administrators are referring to when they identify one school as a good place to work and another as a poor place, even though all material aspects of the two are identical. It is a quality of the faculty group which emanates from interaction within the group in its institutional context. To quote the authors again:

... we chose to limit the scope of the present study to descriptions made of the school primarily in terms of the teacher-principal relationships. (6, p. 7)

Application of the Getzels-Thelen Model to the Problem. The concern of the first portions of this section was to present a theoretical framework for consideration of human behavior in an institutionalized setting. The Getzels model provided a means of conceptualizing the resolution of institutional and personality influences on human behavior in a classroom or faculty group. Climate, or in the case of the faculty, organizational climate, was the construct which,



it was suggested, results from synthesis of these influences in the system. It generates the norms for behavior. In short, group climate is seen as a strongly operative frame of reference for group members.

But the teacher is a member of both social systems in a school. The central problem of this study is to investigate the general hypothesis that there is a circular relationship between these two social systems such that organizational climate becomes part of the frame of reference for teacher classroom behavior and, in parallel fashion, the teacher's experiences in the classroom influence his perceptions of the functioning of the faculty social system. In a sense what is being suggested is that the teacher does not fully "compartmentalize" his membership in different primary groups.<sup>6</sup> Multiple group membership sometimes results in one group's norms continuing to operate as a portion of the individual's total frame of reference in another group situation (9). This carry-over from one group to another may be especially significant when there is commonality of institutional context as is the case with the school faculty and the classroom social system.

This is not to say that every teacher carries from the faculty social system to his classroom group a completely standardized perception of the organization. To say this would be to deny the influence of personality. Even though the social psychological dimension of the faculty social system suggests movement toward consensus, individual

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<sup>6</sup> Discussion on this point is influenced by lectures delivered at the University of Alberta in January, 1963 by Dr. Robert Dubin of the University of Oregon.







perceptions of this will differ according to differences in personal need-dispositions. What is hypothesized is that there is a degree of concomitancy of variation between organizational climate and teacher classroom behavior and that this may be in part explained by the "carry-over" from faculty to classroom, particularly in the matter of attitudes toward the institution and its goals.

Certainly the teacher is in an extremely strong leadership position with respect to the establishment of a classroom climate. Biddle says:

The fact is that in most classrooms the teacher initiates a larger percentage of interactive sequences than do individual pupils. She controls the content of the discussion, operates to keep order and effective response within bounds, and otherwise "takes charge." (1, p. 13)

In Lewinian terms, the teacher has the authority<sup>7</sup> of his position and the power<sup>8</sup> he derives from training, experience, and the opportunity which is his of establishing friendly relations<sup>9</sup> with his pupils. It is his behavior, then, which, to a very considerable extent, influences

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<sup>7, 8</sup> This use of these terms derives from the discussion of Lewinian concepts contained in Cartwright and Zander (2, Chapters I, II, VII, and X); the terms are used in the interests of parsimony and in the belief that the somewhat different orientation of their origin does not detract from the clarity of meaning of their use here.

Authority is viewed as an aspect of formal structure, while power is much more an aspect of informal relationship. It is largely independent of role and is thought of as the ability to influence based on superior knowledge, skill, experience, etc.

<sup>9</sup> Of friendliness in the classroom Lewin says, "Every child is sensitive to even small changes in social atmosphere, such as the degree of friendliness or security. The teacher knows that success in teaching French, or any other subject, depends largely on the atmosphere he is able to create." (7, p. 63)



the sort of classroom climate established (5, p. 122). If the teacher carries into his classroom strong impressions regarding the goals of the institution and the methods of attaining them as a result of the positive leadership of his principal and the attitudes generated in the faculty group (organizational climate), it seems logical that his behavior and hence the classroom climate will reflect them.

Another part of the explanation for concomitancy of variation between organizational climate and teacher classroom behavior may be discovered by looking at the relationships between the two school social systems from quite a different vantage point. It is likely that organizational climate will be operative in influencing the teacher's attitudes in his classroom, but many other factors contribute also. Every pupil brings to the group his own complex of need-dispositions, attitudinal biases based on experience in his other membership groups, and his limitations of intelligence and temperament. Interactional climate in the classroom will be strongly affected by attributes of the teacher--attributes of personality, especially those like intelligence and temperament which, together with training and experience, have shaped his teaching "style." The teacher may tend to be understanding and friendly or aloof and egocentric, responsible and systematic or evading and slipshod, stimulating and imaginative or dull and routine (11, p. 77). The class will respond accordingly, reinforcing these tendencies.

The teacher described by the first of each of the alternative sets of adjectives above tends to carry from the classroom group to any other group of which he is a part attitudes of confidence, generous assessment of others, and some resistance to any less generous and







confident attitudes expressed by others in the new group. He will evince a readiness to share his success and optimism with others (11, pp. 397-8). Less "success" in the classroom is accompanied by a correspondingly different "carry-over." More specifically, what is being suggested here is that the climate established in the classroom, in a large measure by the teacher's own performance there, forms part of the frame of reference of the teacher in his perceptions of his faculty group. The hypothesis of concomitancy of variation between teacher classroom behavior and school organization climate is supported here, then, in terms of the psychological dimension of the model--the personality connection between the two social systems.

### Summary

The problem of the study has been identified as an examination of a hypothesized concomitancy of variation between organizational climate and teacher classroom behavior. In Biddle's terms classroom behavior is mediational between antecedent and contextual variables on the one hand and the consequent variables of school output on the other (1). He would consider organizational climate a contextual variable, albeit an important one. To provide a conceptual model for studying the hypothesized relationship, the Getzels model was employed to depict and explain the operation of classroom group and school faculty as social systems (5). Individual behavior and interpersonal relations within a social system were seen as functions of institutional role and personal need-dispositions mediated by a group climate. The group climate of the faculty social system was identified as the organizational climate of this study. It was argued that the hypothesized concomitancy



of variation results from influences in both directions between the two social systems, producing a circular reinforcement. The influence from faculty to classroom group was said to be largely nomothetic, or in the sociological dimension, i.e., organizational climate tends to influence the teacher's and hence the class group's attitudes towards the goals of the institution and the means of attaining them. The influence of classroom on faculty was seen as being operative mainly through the ideographic or psychological dimension, that is, the teacher's personal need-dispositions, influenced by his "success" in the classroom, color his perceptions of faculty interaction.





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## CHAPTER III

### INSTRUMENTATION

This chapter provides descriptions of the instruments selected for use in data collection for the study. Some recent studies on the reliability and validity of the organizational climate instrument are included. Finally the working hypotheses for the study are stated.

#### I. THE CLASSROOM OBSERVATION RECORD<sup>1</sup>

The instrument chosen for assessing teacher classroom behavior was the Classroom Observation Record (COR) developed by Ryans and his associates at the University of California, Los Angeles, to provide criterion data for the extensive Teacher Characteristics Study undertaken for the American Council on Education (6). The COR itself is an assessment sheet consisting of twenty-two items, four descriptive of pupil behavior and eighteen descriptive of teacher behavior. The items of pupil behavior included are those considered to be at least partially a product of teacher behavior. Each of the twenty-two items is framed in continuum form, the rater being required to mark a level on a seven-point scale indicative of the degree of demonstration of the behavior characteristics, for example: "Pessimistic 1 2 3 4 5 6 7 N Optimistic" (6, p. 89). The N signifies "not able to rate on the basis of this observation session." The assessor is provided with a Glossary

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<sup>1</sup>Permission to use and reproduce the COR was obtained from the American Council on Education, Washington, D.C. A copy of the letter received appears in Appendix C.





which provides lists of phrases descriptive of behavior typical of polar positions on each continuum.<sup>2</sup>

### TCS Patterns

Ratings on the twenty-two items of the COR provide a composite picture of teacher classroom behavior, but the Ryans group employed factor analysis of these first-order dimensions to produce three meaningful patterns of teacher behavior. The patterns are:

TCS Pattern Xo: Understanding, friendly vs. aloof, egocentric, restricted teacher behavior.

TCS Pattern Yo: Responsible, business-like, systematic vs. unplanned, slipshod teacher behavior.

TCS Pattern Zo: Stimulating, imaginative, surgent vs. dull, routine teacher behavior. (6, p. 77)

Table I indicates the derivation of these patterns from the first-order dimensions given by the twenty-two item scores. Because the purpose of this study was to explore the nature of the relationship between teacher classroom behavior and school organizational climate, it was decided that only pattern scores and not the composite score would be employed in the analysis of the data. This decision was further supported by Ryans' discovery that intercorrelations between pattern scores and the remaining first-order dimensions were relatively high, ranging from .52 to .77 (6 p. 104, 105). It might be noted also that the intercorrelations between the pattern scores themselves in the Ryans study were substantial, averaging about .60, but Ryans persisted in his dependence on these clusters both because they showed consistency over several thousand

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<sup>2</sup>The COR and Glossary are reproduced in Appendix A.



TABLE I

FIRST-ORDER DIMENSIONS COMPRISING TCS TEACHER CLASSROOM  
BEHAVIOR PATTERNS Xo, Yo, AND Zo (6, p. 108)

TCS Pattern Xo	TCS Pattern Yo	TCS Pattern Zo
6. Autocratic-democratic	2. Obstructive-responsible (PB) <sup>a</sup>	10. Dull-stimulating
7. Aloof-responsive	14. Evading-responsible	11. Stereotyped-original
8. Restricted-understanding	15. Erratic-steady	
9. Harsh-kindly	16. Excitable-poised	
20. Pessimistic-optimistic	18. Disorganized-systematic	

<sup>a</sup>Obstructive-responsible refers to pupil behavior in the teacher's class, assumed to be partially a product of teacher behavior.





test subjects and because they were supported on a rational basis by the findings of other researchers such as Coffman, French and Gibbs (6, p. 109).

#### Evaluation of the COR

Items for the COR were developed through a combination of intensive study of the literature on personality and on characteristics of teaching, and of the accumulation and analysis of a very extensive list of critical incidents of teacher behavior. Refinement was done through a massive basic analysis study involving the observation of almost four thousand teachers in nearly four hundred schools throughout the United States. Careful training of observers and repeated revision and cross-checking produced an instrument which could be used with a high degree of reliability of assessment by two trained observers and stability of assessment by the same observer. Tables II and III are reproductions of Ryans' typical results relative to reliability and stability respectively.

Though Ryans was able to quote other studies as corroborative of his identification of the TCS Patterns, he admits that no independent approach to the validity of his assessment data was possible. He looks upon the study of the validity and reliability of his observers' assessments as one and the same (6, p. 115). It is almost inevitable that observers of teacher classroom behavior are subject to a hopeless confoundment of description by evaluation, but the ill effects of this are minimized with the COR by the fact that every characteristic very obviously requires a "good-bad" type of decision in establishing the description rating.



TABLE II

RELIABILITY OF ASSESSMENTS OF TEACHER BEHAVIORS  $X_o$ ,  $Y_o$ , AND  $Z_o$ , BASED  
ON CORRELATION OF ASSESSMENT OF FIRST OBSERVER AND SECOND  
OBSERVER WITHOUT REGARD TO THE INDIVIDUAL IDENTITY  
OF THE OBSERVERS (6, p. 118)

Teachers Observed	No. of Observers Involved	No. of Teachers Involved	Reliability Coefficients <sup>a</sup>		
			$X_o$	$Y_o$	$Z_o$
Elementary Sample 1	5	150	.84	.82	.82
Elementary Sample 2	23	150	.62	.61	.66
Elementary Sample 3	23	150	.51	.39	.56
Elementary Composite	23	450	.69	.64	.70

<sup>a</sup>Spearman-Brown estimate of reliability of the composite  
assessment.





TABLE III

STABILITY OF ASSESSMENT OF TCS TEACHER CLASSROOM BEHAVIOR  
 PATTERNS  $X_o$ ,  $Y_o$ , AND  $Z_o$ , BASED ON TWO OBSERVATIONS  
 MADE FOURTEEN DAYS APART BY EACH  
 OF FOUR OBSERVERS (6, p. 121)  
 (N=48 elementary teachers)

Observer	Correlations between First and Second Assessments		
	$X_o$	$Y_o$	$Z_o$
11	.59	.76	.64
23	.67	.72	.56
22	.65	.76	.66
21	.63	.71	.46



For the purposes of this study the greater concern was the validity and reliability of the judgments made by the users of the instrument. Ryans advises:

. . . it may be noted that the reliability and validity of assessments made from direct observations of behavior are enhanced by: (1) attention to the selection of a limited number of relevant behavior dimensions for observation and assessment; (2) the provision of specific and unequivocal operational definitions of the behaviors to be assessed; (3) the observer being well acquainted with the behavior to be assessed and with the situations in which the behaviors frequently are manifest; (4) the observer focusing his attention on the specified behaviors and carefully avoiding the influence of general impressions, unusual or dramatic behaviors, and inferences about what behaviors might occur in unobserved situations; (5) the immediate assessment of the behavior during or shortly following the observation; (6) the independent assessment of each specified behavior; (7) the recognition and suppression by the observer of personal biases relative to the individuals or behaviors; (8) care on the part of the observer to avoid such rating biases as the central tendency error, the leniency error, etc.; and (9) the replication of observations and assessments by independent, though similarly trained observers. (6, pp. 75, 76)

As the details of procedure given in Chapter V indicate, considerable care was taken to comply with Ryans' advice.

The assumption was made that Ryan's instrument and the procedures followed would produce sufficiently valid and reliable descriptions of patterns of teacher classroom behavior for the purposes of the study.

## II. THE ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

Halpin and Croft's Organizational Climate Description Questionnaire (OCDQ) was used to measure the organizational climate of the schools of the sample.<sup>3</sup> At the time this study was undertaken only a preliminary report of the Halpin and Croft study was available as a first report of

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<sup>3</sup>The OCDQ is reproduced in Appendix B





their work under Contract Number SAE 543(8639) with the United States Office of Education (3). For this reason permission was sought from the Cooperative Research Branch of that Office to reproduce the OCDQ and to use it in this study. A copy of the letter of authorization is included in Appendix C.

The OCDQ is a questionnaire of sixty-nine items, sixty-four of which are scored. It is designed to be administered in a period of about thirty minutes to a whole school faculty, each member completing his own questionnaire independently. Responses to the items are marked on a four-level, Likert-type scale: Rarely occurs, Sometimes occurs, Often occurs, and Very frequently occurs. The values assigned to these responses are six, seven, eight, and nine respectively, though certain designated items have the values reversed.<sup>4</sup> Neither the item values nor the fact that the sixty-four scored items constitute eight subtests is apparent to the respondent. The eight subtests provide four scores mainly descriptive of principal interaction with staff, while the other four are chiefly illustrative of within-staff interaction.

Questionnaires are scored, item scores combined by subtests and averaged, the subtest scores for each school faculty averaged, and the resulting school means standardized with a mean of fifty and a standard deviation of ten to produce what Halpin and Croft term the normative standardization of scores. The eight school subtest scores thus obtained are then standardized for each school, again with a mean of fifty and a

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<sup>4</sup>Table XLVIII, Appendix B shows the composition of the subtests and the application of score values to test items.



standard deviation of ten. This yields the ipsative standardization and gives an eight-score profile for each school which is used to determine the organizational climate for the school. Climate identification is accomplished by finding the sum of the absolute numerical differences of the eight subtest scores for a school for each of six prototypic profiles developed by Halpin and Croft to represent six categories on the openness of climate continuum, Open-Closed.<sup>5</sup> The school is considered to have the climate of the prototypic profile yielding the smallest sum of absolute differences (4, p, 55). A description of the characteristics of each category and the nature of the behavior purported to be revealed by each of the eight subtests is inserted at this point in order to make more meaningful some evaluations of the instrument which follow.

#### Definition of Terms Associated with the OCDQ

Halpin and Croft present quite extensive descriptions of the eight dimensions or elements of organizational climate which the subtests are designed to measure (4, pp. 29-32). These may be summarized as follows:

##### Teachers' Behavior

1. Disengagement is a measure of the degree to which teachers are not genuinely committed to the goals of the organization and to the belief that these can best be achieved by coordinated effort. Disengagement is related to the more general concept of anomie, first described by Durkheim.
2. Hindrance is a measure of the degree to which teachers feel that the principal burdens them with routine duties, committee demands and other requirements which the teachers construe as unnecessary. It is the degree to which teachers perceive that the principal is hindering rather than facilitating their work.
3. Esprit is a measure of what is frequently referred to as morale. It reflects staff satisfaction with both goal achievement and social needs fulfilment.

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<sup>5</sup>Table XLIX, Appendix B contains the prototypic profile values for the subtests.







4. Intimacy provides an indicator of staff social relations. The social-needs satisfaction measured by this subtest is not necessarily associated with task accomplishment.

#### Principal's Behavior

5. Aloofness is a measure of the degree of formality which characterizes the principal's relations with staff members. It indicates the degree to which his behavior towards staff is universalistic rather than particularistic, nomothetic rather than ideographic, chiefly guided by rules and policies rather than being informal and flexible.

6. Production Emphasis provides a measure of the extent to which the principal's supervision is directive, autocratic, and insensitive to feed-back from staff. It is strongly task oriented.

7. Thrust, like Production Emphasis, is related to the principal's concern for task accomplishment, but it is a measure of the principal's ability to motivate through example, and of his ability to communicate his genuine concern for goal achievement to staff, rather than a measure of directive supervision. It implies two-way communication between principal and staff.

8. Consideration is a measure of principal's desire to be helpful and friendly to staff. It has a strong social-needs connotation, though it is by no means divorced from goal orientation.

Plaxton's summary of the Halpin and Croft descriptions of their categories of climate adequately points up the key point that the categories represent degrees of openness or closedness of organizational climate (5, pp. 37-39).

The Open Climate is represented by a profile having high scores for Esprit, Thrust, and Consideration, low scores for Disengagement, Hindrance, Production Emphasis, and Aloofness, and an average score for Intimacy. The organization described by an Open Climate is one in which the leadership acts emerge easily from both the group and the leader. The members are preoccupied disproportionately with neither task achievement nor social-needs satisfaction.

The Autonomous Climate is characterized by low scores for Disengagement, Hindrance, and Production Emphasis, an average score for Consideration, relatively high scores for Esprit, Intimacy, and Thrust, and a high score for Aloofness. Leadership emerges primarily from the group. The leader exerts little control over the group members. High Esprit results primarily from social-needs satisfaction, although satisfaction from task achievement is also present.





The Controlled Climate is marked by high scores for Hindrance and Production Emphasis, and low scores for Disengagement, Intimacy, and Consideration. The Esprit score is slightly above average, as is the score for Aloofness. The principal receives an average score for Thrust. The school with a Controlled Climate is described as impersonal and highly task oriented. The Esprit score reflects achievement satisfaction at some expense to social-needs satisfaction.

The Familiar Climate is represented by a profile having high scores for Intimacy and Consideration, and low scores for Production Emphasis, Aloofness, and Hindrance. There is average Esprit and the principal is assigned a score above average for Thrust. The group score on Disengagement is high. The situation in a school with this Climate is highly personal, but uncontrolled. Esprit is average but one-sided because it stems almost entirely from satisfaction of social needs. Members secure little satisfaction from task achievement.

The Paternal Climate is characterized by high Disengagement and Production Emphasis combined with low Esprit, Intimacy, Hindrance and Aloofness. The principal is relatively high on Thrust and Consideration. In this situation the principal constrains the emergence of leadership acts from the group and attempts to initiate most of these acts himself. Little satisfaction is attained from either achievement or social needs, and, as a result, morale is low.

The Closed Climate is marked by high scores for Hindrance, Disengagement, Production Emphasis, and Aloofness, and low scores for Esprit, Thrust, and Consideration. The score for Intimacy is average. There is a high degree of apathy on the part of all members of the organization. The principal is aloof. He emphasizes production, and sets up rules and regulations but he does not motivate by setting a good example himself. Esprit is very low because group members secure neither social-need satisfaction nor satisfaction that comes from task achievement.

#### Evaluation of the OCDQ Based on Halpin and Croft's Report

The instrument was constructed by a procedure involving inductive development and deductive refinement. Extensive use was made of earlier studies which had resulted in other questionnaires designed to measure interactional relationships (4, p. 20). One thousand possible items were reduced through taxonomic reference, empirical trial in three different forms of the questionnaire, and factor analysis to the sixty-four





items of Form IV which appears in Appendix B. Seventy-one elementary schools with 1151 faculty members were used as a base sample in establishing norms. The schools were scattered through six widely separated states of the United States of America.

Reasonably acceptable subtest reliability is indicated by the three tests summarized in Table IV. Confoundment of inter-school and intra-school variance was avoided by standardizing subtest raw scores both normatively and ipsatively to produce the school profiles. Halpin and Croft note the following limitations relative to validity. (1) No effort was made to introduce any external criteria such as school effectiveness. Instead effort was concentrated on internal consistency. (2) Since the dimensions of the OCDQ had a taxonomic derivation, questions of validity were not applicable in the developmental stage. (3) Descriptions of climate dimensions are based on teachers' perceptions of others' behavior.

The care taken to develop internal consistency was impressive. The face validity was obvious. Construct validity was indicated by the derivation of the items and the broad experience of the authors, though no concrete evidence was available. The relatively small size of the base sample and its rather narrow representation were disturbing in respect to placing reliance on the absolute identification of climate types. However it was concluded that the subtest structure especially, and perhaps the differentiation provided by the climate continuum would make possible reasonable analysis of the broad area of relationship between the interactional climate of the school faculty social system and that of the school classroom social system as it is revealed in



TABLE IV

ESTIMATES OF INTERNAL CONSISTENCY AND OF EQUIVALENCE FOR  
THE EIGHT OCDQ SUBTESTS (4, p. 49)

Subtests	Split-Half Coefficient of Reliability Corrected by the Spearman- Brown Formula <sup>a</sup> (N=1151)	Correlations between Scores of the Odd- Numbered and the Even- Numbered Respondents in Each School <sup>b</sup> (N=71)	Communality Estimates <sup>c</sup> for Three- Factor Rotational Solution (N=1151)
Disengagement	.73	.59	.66
Hindrance	.68	.54	.44
Esprit	.75	.61	.73
Intimacy	.60	.49	.53
Aloofness	.26	.76	.72
Production Emphasis	.55	.73	.53
Thrust	.84	.75	.68
Consideration	.59	.63	.64

<sup>a</sup>Estimates of internal consistency.

<sup>b</sup>Estimates of equivalence.

<sup>c</sup>These are lower-bound, conservative estimates of equivalence.





the classroom behavior of the teacher. Though it was considered that the climate labels would have to be applied with caution, the OCDQ was thought to be generally acceptable.

Comment has been made that this study would provide some opportunity for testing the validity of the OCDQ. The investigator had in mind particularly Halpin and Croft's apparent complete satisfaction with the idea that a composite of teachers' perceptions of climate dimensions did indeed define these dimensions. They professed not to be afraid of the "phenomenological box" because, whether what the teachers perceived was reality or not, it certainly governed their behavior (4, p. 9). The testing of Hypothesis Three of this study could not be accomplished without bearing upon this point.

#### Reliability and Validity Studies

The current preoccupation with organizational theory in educational administration has resulted in a rather rapid growth of interest in Halpin and Croft's OCDQ. As a result useful work has been done recently in testing the reliability and validity of the instrument.

Reliability. Brown reported a study undertaken at the University of Minnesota during 1963-64 for the purpose of establishing climate profile norms for Minnesota. One of the stated ancillary purposes of the study was the testing of the reliability of the OCDQ (3, p. 2). The project was essentially a replication of the Halpin and Croft procedure from the stage at which the latter had reduced their item total to the final sixty-four. A pilot study was done in three schools and then the main study conducted in a sample of eighty-one schools. The reliability of each of the eight subtests of the OCDQ was checked by three methods:



the communality estimates of the rotated factor solution were used as lower-bound estimates of equivalence, since the communality contained only the common variance; the average scores of the odd-numbered and even-numbered teachers in each school were computed and the eighty-one pairs of scores were correlated; finally, correlations were computed between the individuals' responses to the first and second testing in the pilot study, thus yielding a test-retest reliability coefficient. Reliability coefficients found by these methods compared favorably with those of Halpin and Croft. Esprit rated .81 on the test-retest sample and .68 on each of the other methods. Admitting that the test-retest sample was very small ( $N=46$ ), that an error in judgment had led to a bias in the division into odd and even responses, and that school scores rather than individual scores are a more appropriate unit of comparison for climate, Brown cautiously concluded that the reliability coefficients were high enough to be encouraging. This is probably as much as could be said in the light of the design and procedures described.

It should be noted also that the Minnesota factor analytic procedures produced eight prototypic school climate profiles rather than Halpin and Croft's six, with the result that Brown states:

Types of organizational climate can be identified through the use of the OCDQ but it is not possible to generalize about the exact nature of the specific climates. . . . researchers of organizational climate should be careful not to become overly dependent on the arbitrary classifications of climate created by other investigators. (3, p. 13)

Validity. A validity study of the OCDQ undertaken at the University of Alberta in 1964-65 was recently reported by Andrews (1). The major method used was a construct validity approach which "regards







a measure as valid to the extent to which the measure demonstrates relationships with other measures which can be predicted in accordance with theory" (1, p. 2). It was determined from Halpin and Croft's monograph that their OCDQ purported to measure social interaction between the principal and the teachers, and, since this is a heterogeneous concept, it was recognized that subtest scores were likely to be at least as important as the total derived score (4).

The OCDQ was administered in 165 Alberta schools. In addition global ratings were obtained on teacher perception of Teacher Satisfaction, Rated School Effectiveness, and Rated Principal Effectiveness. Faculty members were also asked to complete a questionnaire to provide biographical characteristics such as age, sex, training, experience, and grade taught.

The schools in the sample were of four types: elementary, elementary-junior high, secondary, and combined. Andrews produced three kinds of evidence to show that the OCDQ is as valid for other kinds of schools as it is for elementary schools, the only type in Halpin and Croft's sample. The first line of evidence was the similarity of distribution of climates in all four types, and the similarity of all of these to the Halpin and Croft distribution. The second item of evidence was the relative stability of subtest scores regardless of whether they were standardized across the whole sample or the subsamples corresponding to school types. The third and most direct type of evidence was provided by the comparisons of the intercorrelations of climate and climate subtest scores for the four categories of schools, taken two at a time. Only three of 756 possible correlations showed difference and these were satisfactorily explained.



Andrews then moved to an examination of the level of validity which he had demonstrated to be equally operative over the different types of schools. He examined the intercorrelations between the sets of scores for pairs of subtests, and between each set and the climate scores for the total sample, and found all but one of the significant correlations in the expected direction. Since this one could also be rationalized he concluded that the indicated validity was high. Relationships with reported teacher characteristics were studied in a similar fashion. These, too, provided many relationships in line with theory, and none inescapably opposed.

Andrews' report continues with a brief description of two sub-studies which were reported as masters theses. In the first of these Schmidt related OCDQ subtest scores to the subtest scores of the Leader Behavior Description Questionnaire (1, pp. 21-24). He found twenty-seven significant relationships out of a possible 108. Surprisingly enough no significant correspondence was found between the two subtests bearing the same title, Consideration. Andrews concluded that the high number of meaningful relationships is reassuring with respect to both instruments, and that the invalidity indicated by the lack of correspondence on Consideration is minimized by the specificity of the OCDQ definition of Consideration.

In the second reported substudy Plaxton performed a similar analysis of the relationships between OCDQ subtest scores and aspects of principals' personality revealed by the Myers-Briggs Type Indicator (1, pp. 24, 25). Though no significant relationships were revealed, their indicated directions were as expected.







Andrews found that the global rating of Teacher Satisfaction exhibited a very strong positive relationship with Climate, Esprit, and Thrust, and a negative relationship with Production Emphasis and Hindrance. Rated Principal Effectiveness showed a high positive relationship with Thrust, and Rated School Effectiveness with Esprit and Climate. All other relationships were in the expected direction. The large number of significant relationships provided very strong apparent evidence of OCDQ validity, though the strong halo effect of teachers' subjective judgment of their own school's qualities must temper this conclusion.

Finally climate scores were correlated with a school achievement index and an analysis of variance conducted (1, p. 31). Climate was found unrelated with achievement, but some fifteen percent of the variance was attributable to subtest effects, this being at least as much as Greenfield's study would give reason to expect (1, p. 35).

From these extensive studies, Andrews drew the general conclusions that: (1) though Halpin and Croft's climate categorizations may be considered as reasonably valid descriptions of commonly occurring patterns of certain aspects of principal-staff interaction, the term organizational climate is much too broad to use in encompassing these aspects, and that the names applied to these patterns and the term organizational climate itself are actual detractions from the validity of the instrument; and (2) the subtests have internal consistency and are reasonably valid measures of important aspects of the leadership of the principal in a perspective of interaction with his staff (1, pp. 36-38).

Implications. The reliability and validity studies reported above tend to confirm the general conclusions reached when the OCDQ was chosen



for use in this study: subtest scores might be expected to provide a means of analysing the relationship hypothesized to exist between the two complex variables with which the study was concerned, and the differentiation provided by the climate categories might assist in revealing the relationship, but little use was likely to be possible of the specific definitions of these categories.

## II. THE WORKING HYPOTHESES

The first section of this chapter has explained the nature and forms of the data which were gathered through the use of the COR and the OCDQ. It now appears appropriate to state the working hypotheses for the study.

The working hypotheses for the study, stated as null hypotheses, are:

Ho.1a. School organizational climate and staff mean scores on TCS Pattern X<sub>o</sub> are unrelated variables.

Ho.1b. School organizational climate and staff mean scores on TCS Pattern Y<sub>o</sub> are unrelated variables.

Ho.1c. School organizational climate and staff mean scores on TCS Pattern Z<sub>o</sub> are unrelated variables.

Ho. 2. Dimensions of school organizational climate and staff mean TCS Pattern scores are unrelated variables.

Ho.3a. Teachers' OCDQ subtest scores and their TCS Pattern X<sub>o</sub> ratings are unrelated variables.

Ho.3b. Teachers' OCDQ subtest scores and their TCS Pattern Y<sub>o</sub> ratings are unrelated variables.





Ho.3c. Teachers' OCDQ subtest scores and their TCS Pattern Zo ratings are unrelated variables.

- (i) Null hypothesis: There is no significant relationship between the scores of teachers' OCDQ subtest scores and their TCS Pattern Zo ratings.
- (ii) Alternative hypothesis: There is a significant relationship between the scores of teachers' OCDQ subtest scores and their TCS Pattern Zo ratings.
- (iii) Level of significance: 5% (0.05)
- (iv) Test statistic: Chi-square test
- (v) Decision: Since the calculated value of Chi-square is less than the table value, the null hypothesis is accepted.
- (vi) Conclusion: There is no significant relationship between the scores of teachers' OCDQ subtest scores and their TCS Pattern Zo ratings.



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## CHAPTER IV

### RELATED RESEARCH

In this chapter a brief look is taken at the extensive literature resulting from the reporting of research in the general area of concern of this study. The chief purpose to be served is to place the present study in a context of the efforts of other investigators who were concerned with related problems. No pretense is made of presenting a complete review. The chapter is divided into two sections, one related to research on teacher performance, and the other on the emergence and use of the organizational climate concept.

#### I. TEACHER BEHAVIOR

As was mentioned previously, there has been very great concern with the problem of measuring teacher effectiveness, with the result that literally thousands of research studies have been conducted in this field since 1891, when such formal studies appear to have begun (12, p. 12). Even the job of producing an annotated bibliography in this field has become monumental in proportions, e.g., that of Domas and Tiedeman contains 1110 titles (11). Other important works in the field are those of Mitzel and Gross (31), Castetter et al (9), Liederman et al (26), Levin et al (25), Remmers et al (33)(34), Ryans, in the most recent "triennial" review by the Review of Educational Research (36), and Barr's periodic reviews over the past thirty years of which the most recent is his 1961 review of the Wisconsin studies (6). In spite of this great



activity, Remmers was forced to report in 1953:

The simplest fact of the matter is that, after 40 years of research in teacher effectiveness during which vast numbers of studies have been carried out, one can point to few outcomes that a superintendent of schools can safely employ in hiring a teacher or giving him tenure. (34, p. 657)

### Criteria of Effectiveness

Part of the difficulty has been in establishing criteria for effectiveness. The Remmers group has attempted to provide a basis for judgment of these with the "ultimacy-proximacy" continuum construct. The more ultimate are measures of pupil growth which is considered to be the ultimate purpose of teaching, while less direct indicators such as characteristics of teachers are placed on the proximate end of the continuum (33). Ultimacy in a criterion is desirable but what is normal pupil growth? How does one measure it? How much of it is due to the influence of the teacher? How can the required experimental controls be applied in measurement? These are some of the problems which research workers face.

If one is tempted to move to the other or proximacy end of the continuum he finds himself relating effectiveness to such criteria as teacher intelligence, subject matter knowledge, professional training, age, sex, marital status, socio-economic background, and the like. More recently there has been considerable interest in exploring relationships between various measures of personality components and teacher effectiveness. Mitzels comments that such criteria are honored by constant wide use, but most research gives them low success ratings (3).

In discussion of the criterion problem, Mitzels points out that







any criterion chosen must have (1) relevance to the goals of the school, (2) reliability which can be established, (3) freedom from bias produced by extraneous variables, and (4) practicality. As an alternative to the proximacy-ultimacy continuum, Mitzels suggests the subdivision of criteria into (1) product criteria, which correspond to the ultimate, (2) process criteria, and (3) presage criteria which correspond to the proximate end of the Remmers continuum. Process criteria are those aspects of teacher and student behavior believed worthwhile in their own right. These would be observable and would include aspects of discipline, rapport, and individual instruction (30, pp. 1483-4).

### Teacher Classroom Behavior

Many writers and researchers appear to agree that observation of classroom behavior is the answer to obtaining information on teacher effectiveness which will have operational applicability in selection and placement of teachers and in shaping teacher training programs. Barr (6), Ackerman (1), Remmers (34), Ryans (35), Biddle (7), Withall (40), Flanders (15), Medley and Mitzel (29), and Hughes (22) all write positively about observation of classroom behavior of teachers as a means of deriving reliable data regarding a desirable teaching-learning situation. But, as the following paragraphs will show, one must not for a moment form the opinion that these people are talking about the same things.

Flanagan's Critical Incident Technique. Flanagan (14) developed a critical incident technique for describing teacher behavior. Observers and teachers reported anecdotal incidents which seemed to them to illustrate particularly effective or ineffective practices of teachers. These were classified in an attempt to establish discernable



patterns. The categorization proved most difficult with the result that Flanagan's instrument did not have great operational value. However, the idea illustrates an early attempt to understand the effectiveness of a school by analysing the behavior of its teachers. The critical incident idea has influenced many later studies of human behavior in education including both Ryans' (35) and Halpin and Croft's (20).

Analysis of Teachers' Verbal Behavior. Withall (40) under influence of Lippitt's work on the effects of democratic and autocratic leadership (27) and Anderson's studies indicating that classroom climate is largely a product of teacher behavior (3), undertook an analysis of teachers' verbal behavior from sound recordings taken in the classroom. Teacher statements were classified into a final seven categories: (1) learner supportive statements, (2) acceptant and clarifying statements, (3) problem structuring statements, (4) neutral statements, (5) directive or hortative statements, (6) reproving or deprecating remarks, and (7) teacher self-supporting remarks. The first three tended to be learner centred and the last three teacher centred. After objectivity, reliability, and validity tests, the categories were tried on transcripts of a number of recordings of regular classroom sessions. It was found possible to produce meaningful climate descriptions in terms of the seven verbal categories.

Perhaps the most significant feature of this study is the use of a mechanical recorder to obtain a complete reproduction of classroom verbal behavior for detailed study.

Ryans' Teacher Characteristics Study. Ryans (35) made considerable use of Flanagan's and Withall's methods in developing his







Classroom Observation Record but he eliminated the mechanical process of coding or recording in favor of a return to the use of the more traditional scoring sheet to be completed after the observation. (See Chapter II and Appendix A.) Ryans did this to make the instrument operationally practical for large scale field use, recognizing when he did it that he opened the door to gross rater differences. He makes a rather good case for the elaborate system of safeguards he devised to overcome this potential weakness.

Medley and Mitzel's Criticism. Medley and Mitzel are not impressed (29). They find the COR items broad--representative of judgments based on many behaviors, not a unit behavior. They assert that the rater is not making a single objective judgment on each item, but rather is completing a four-step process: (1) observing simultaneously a large number of specific behaviors, (2) storing these in memory, (3) weighing each "by some procedure analagous to that used in a multiple regression equation" (29, p. 252), and (4) producing independent numbers to best describe each of the twenty-two multiple categories to be judged.<sup>1</sup>

Medley and Mitzel appear to be classifying Ryans' COR with the many hastily assembled rating forms used for years in routine administrative assessments of teacher competence. From this point of view they receive support from Biddle (7, pp. 25-27) and from Worth (42).

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It might be noted that Medley and Mitzel's comments were published some months after the study described in this report was completed.



But Ryans' COR, used as he intended it to be used, is not just another rating form. It goes a long way toward bridging the gap between check-list rating and scientific observational techniques.

Observational Techniques. Of observational techniques Biddle says:

Ideally, the investigator should gather information about overt variables through the direct observation of behavior. Thus formative experiences of the teacher should be witnessed, teacher behavior in the classroom should be recorded mechanically, and all outcomes of education should be traced in terms of overt responses of pupils and others. (7, p. 21)

He lists four types of observational techniques: (1) participant observation, a technique used extensively in anthropology, (2) categorical check lists, (3) specimen records--handwritten detailed records of the subjects' participation in interaction, and (4) electronic recording. The most effective of these is the last. It is also the most expensive.

Cost and time involved are the chief deterrents to broader use of carefully controlled observational techniques in research involving questions related to teacher classroom behavior or the effectiveness of the instructional program. In order to make it possible for the research of university personnel, including doctoral candidates, to have the advantage of these promising techniques, it will be necessary for universities to arrange related sequences of such studies so that one comprehensive set of observations may be used as the source of data for several experiments. Undoubtedly the end result would be a much more useful contribution to the large, but somewhat discouraging, literature on teacher performance and its relation to pupil growth.







## II. ORGANIZATIONAL CLIMATE

The effects of group and multi-group membership on human behavior have been a subject of study by social scientists and educators for many decades.

### Group Membership and Attitude Change

The Bennington College Study. Illustrative of early significant advance in this field is the work of Newcomb and his associates at Bennington College (32). The 250-odd girls at Bennington, nearly all from privileged homes in the Eastern United States, were the subject of a five-year longitudinal study of attitude development in the field of public affairs during the latter half of the turbulent decade of the 1930's. It was a self-contained, close-knit college group with unusual enthusiasm, self-consciousness and concern for world social problems. There was abundant, strong student leadership. The attitude study showed that, while the attitudes of most girls changed over the period of their college stay toward a fairly homogeneous set of "college" views, there were a substantial number whose attitudes continued to be influenced more or less strongly by those of other membership groups, most often the family group. Newcomb comments:

. . . in a community characterized by certain approved attitudes, the individual's attitude development is a function of the way in which he relates himself both to the total membership group and to one or more reference groups. (32, p. 275)

Effects of Salience. A somewhat more specific experiment, but one with equally as great importance for the present study was one undertaken by Charters and Newcomb (10) in which they sought to show that the salience for the individual of a membership group affects



the change produced in his attitudes by group membership. Most people belong to many groups, some of which could prescribe rather contrary views toward the same object. The investigators asserted:

It seems reasonable to hypothesize that an individual's resolution of this problem will be a function of the relative potencies of his various group memberships. If the potency of one group is extremely high in relation to others he may adopt the attitude prescribed by this particular group. . . . (11, p. 276)

Experimental and two types of control groups were set up among college freshmen who had been divided into the religious categories, Jewish, Catholic, and evangelical Protestant. After the experimental groups had participated in discussions centering around the basic tenets of their respective religious beliefs, all groups answered questionnaires containing some questions of religious significance. The hypothesis of the significant effect of artificially heightened salience on religious attitudes was clearly upheld in the case of the Catholics, but not for the Jews and Protestants. The failure of the effects to show with the two non-Catholic groups was explained by (1) the relatively smaller influence which religious group membership exerts on Protestants, and (2) the presence of persons in both of these groups who reacted negatively to awareness of their religious affiliation.

Both of these experiments produced sufficient positive results to indicate support for the contention underlying this study that membership in two school social groups will result in the teacher's carrying the influence of each as a part of his general frame of reference for his membership in the other.

### Climate

Anderson's Study. Anderson and his associates undertook one of the earliest systematic studies of "climate" in the classroom (3).







They recorded the "dominative" and "integrative" actions of teachers and pupils in the classroom interaction of elementary and pre-elementary classes. Their studies demonstrated clearly that the dominative and integrative acts of teachers set behavior patterns which were reflected in classroom interaction generally.

### Leadership and Climate

Lippitt's Study. The effects of leadership style on the nature of the group climate established was further demonstrated by the Iowa studies of Lewin, Lippitt, and Whyte (reported in 41). The significance of the basic study is well reported by Lippitt in his doctoral dissertation of 1940 (27). Group climates artificially produced in experimental boys' clubs through deliberately contrived variations of autocratic and democratic leadership, led Lippitt to conclude (1) that different leader behavior styles do produce different group climates, (2) that conversation categories differentiated leadership style better than social behavior categories, (3) that different leaders playing the same kind of leadership role used similar behavior styles and produced similar reaction patterns, (4) that group members in a democratic climate were more friendly to each other, showed more initiative, more group-mindedness and work-mindedness, and had a higher level of frustration tolerance, and (5) that leader behavior categories represent the important parameters to which the children reacted (27).

The Ohio Studies. At Ohio State University extensive studies of group "dimensions" and particularly of leadership resulted in the production in the 1950's of two instruments to explore group relationships, the Group Dimension Description Questionnaire (GDDQ) and the Leadership



Behavior Description Questionnaire (LBDQ) (39). There is double reason for mentioning them here. Not only do they represent further attempts to chart and study aspects of interaction in groups, but also the theory and methods used in their development were to influence strongly the work of Halpin and Croft in the development of the OCDQ (20). (Halpin was a part of the Ohio research team for a time and worked extensively with the LBDQ.) (18), (19)

The GDDQ is a 150-item questionnaire intended to be completed by each member or randomly chosen members of the group under study. It yields scores on thirteen dimensions of group interaction which form a profile of that group's relationships. The GDDQ can be used either to assess an individual group member's particular orientation to the group, or to obtain a description of the group as seen by the members collectively. The thirteen dimensions are labelled Autonomy, Control, Flexibility, Hedonic Tone, Homogeneity, Intimacy, Participation, Permeability, Polarization, Potency, Stability, Stratification, and Viscidity (37).

The LBDQ is a forty-item questionnaire to be completed by group members. Again it can be used either to indicate the individual's perception of his leader's behavior or to provide the collective opinion of leader behavior. Factor analysis of item results produced two predominant qualities of leader behavior, Consideration and Initiating Structure, though a number of others had been included in the design.

Consideration refers to behavior on the part of the leader that is characterized by warm friendly relations with group members, concern with group member welfare, respect for their integrity, etc. Initiating Structure refers to activities on the part of







the leader that introduce organization, new ways of doing things, and new procedures for solving group problems, etc. (21, p. 75)

The kinship of Consideration to Getzels' ideographic style of leadership, and of Initiating Structure to his nomothetic style, is apparent (16). Keeler (23) demonstrated the effectiveness of a leadership style combining high ratings on both Consideration and Initiating Structure, a style analagous to the Getzels transactional behavior (16).

In 1959 McBeath (28) made an adaptation in the LBDQ for use in obtaining school students' ratings of teacher leader behavior in the classroom. Greenfield (17) successfully employed this TLBDQ to show significant relationship between teacher leader behavior and pupil growth as measured by examination results in mathematics and social studies.

Stogdill and his associates at Ohio State University have recently (1963) produced a new enlarged version of the LBDQ (38). One hundred questions are used to produce information on twelve qualities of leadership. This return to a search for a broader spectrum of leadership dimensions grew out of Stogdill's theory that role differentiation in groups and group achievement are complex and affected by many variables such as tolerance of uncertainty, persuasiveness, tolerance of member freedom of action, integration of the group, and reconciliation of conflicting demands (37).

### Morale

Keeler's Study. Another aspect of group interaction which might be considered contributory to the broader quality of climate, and which has received special study, is that of morale. Keeler (23) reviewed the literature in this field and in his own study attempted to show



relationships between principal leadership and staff morale, morale and productivity of the school, and leadership and productivity of the school. He employed grade nine examination results with the effects of intelligence held constant as his productivity measure. Leadership was measured by the LBDQ, and morale by a self-constructed instrument called the Keeler Scale for the Cohesiveness and Induction of Teaching Staffs (KESCITS). KESCITS is a twenty-item form, each item requiring the teacher to select one of five alternative words to complete a statement. Items were designed to produce scores on Induction and Cohesiveness. Induction is goal orientation; Cohesiveness is a measure of group members' feelings of belongingness to the group. Both dimensions of morale and both dimensions of leadership showed significant positive correlation with the measure of productivity, though leadership dimensions gave the highest correlations. The best prediction of productivity by two variables was given by Initiating Structure and Induction. Significance of relationship was not achieved between leadership of principal and morale of staff, but there is a reasonable basis for inferring from the study that such a relationship does indeed exist, but that instrument deficiencies, particularly in KESCITS, prevented its being demonstrated.

#### Organizational Climate

Argyris' Study of a Bank. The complexity of human interaction and its results is strikingly illustrated by Argyris in his study of organizational relationships in a large bank (5).

Anyone who conducts research on human behavior in organizations is always faced with the problem of ordering and conceptualizing a buzzing confusion of simultaneously existing, multi-level, mutually interacting variables. (5, p. 501)







Argyris identified three classes of behavioral variables--the formal, the personal, and the informal--somewhat akin to the institutional, personal and group influences in the Getzels-Thelen model (page 24). But he conceptualized a fourth, called the organizational behavior variable, which is produced by the simultaneous interplay of the first three, each playing a functional role and feeding back on the others. This living complexity is organizational climate. It is complex but it is finite. It has boundaries. If it persists it may have researchable order in its elements, i.e., it constitutes an input-output model with feed-back channels.

In the bank the original input is human beings whose first concern is their personalities, but the expectations of the formal organization are impressed at once through the hiring process: only the "right type" are hired. The officers of the bank are also the "right type" and they apply their kind of leadership. Any incongruency of formal and personal factors leads to an informal employee culture developing with norms opposed to the formal expectations. There is feed-back, but officers condone it: hence a homeostatic state is reached which is the "organizational charter." It is one of passive leadership and low work output, but it is essentially "satisfying" to all, hence it persists.

#### The OCDQ

Argyris' is a much more complex conceptualization than Halpin and Croft's organizational climate, a fact which they take pains to point out:



. . . when we speak of Organizational Climate within the present context we will refer exclusively to the social interaction between principal and the teachers--to the "social component" of Organizational Climate. (20, p. 7)

An early reference to the Argyris study in the Halpin and Croft monograph suggests that the term organizational climate may have been borrowed from Argyris (20, p. 1). The "social component" reference would seem to confirm this.

A description of the OCDQ and its development, together with substantial reference to two studies done to test the reliability and validity of the instrument, have been presented in Chapter III of this report. This section of Chapter IV is concluded with very brief reference to other studies, recently completed, in which the OCDQ has been employed.

Feldvebel's Study. In his doctoral thesis (1964) Feldvebel (13) undertook to relate organizational climate as measured by the OCDQ to socio-economic status of the school community and to school output as measured by standard achievement tests. Relationships were sought with both the global concept of climate and with the "elements" of climate, the eight subtest scores of the OCDQ. Analysis of variance showed no relationship between climate and the social class level of the community, but the Hindrance and Consideration subtests were significantly related with the criterion variable. Both are aspects of principal behavior. Analysis of covariance showed no relationship between climate and achievement, but again two elements related to principal behavior (Production Emphasis and Consideration) showed significant relationships with the criterion variable. Additional







data gathered showed a number of significant relationships between school and community characteristics and elements of organizational climate. Most interesting among these is the relationship between financial support level and elements of principal behavior.

Anderson's Study. Anderson (2) conducted a study of the relationship between organizational climate as measured by the OCDQ and personal variables of elementary school principals. The personal variables were personality factors measured by the 16 Personality Factor Questionnaire, values as determined by the Study of Values, and biographical information. Anderson apparently obtained thirty-one significant correlations out of a possible 176 when the eight OCDQ subtest scores were intercorrelated with the sixteen personality and six value variables. This enabled him to sketch remarkably different characteristics patterns for the principals of schools classed as high or low on the climate subtests. Five of the same twenty-two personality factors showed significant difference on an analysis of variance for schools in three categories of openness of climate. A chi square test showed six significant relationships between openness of climate and certain biographical variables of principals. Finally principals' perceptions of climate dimensions were found to be significantly different from staff perceptions for six of eight subtests.

These results indicate great versatility for the OCDQ. This indication is, however, not entirely supported by the results of other studies reported in this section and in Chapter III.

Kirk's Openness of Climate. Kirk (24) studied the concerns, satisfactions, and behaviors of teachers new to an elementary school



building in relation to the climate of the school and the dogmatism of the teachers as measured on the Dogmatism Scale. Again the OCDQ was used to measure climate. An interesting innovation was introduced relative to climate. Instead of using Halpin and Croft's six categories of climate, Kirk, in consultation with Croft, established a numerical continuum of openness of climate. The openness score is obtained by adding the profile score on Thrust to that on Esprit and subtracting that on Disengagement from the sum.

In view of the findings of Feldvebel (13) and the comments of Andrews (4) and Brown (8), Kirk's measure of openness of climate could prove to be of more use in research analysis than the six climate categories. It was decided to add this measure to those already chosen to test the relationships hypothesized in this study.

### III. SUMMARY

In the first section of this chapter research literature was quoted or referred to which made clear the very great concern that researchers have felt for the need to develop a reliable and valid means of measuring teacher effectiveness. This brief survey has served to illustrate their notable lack of success, much of it resulting from inability to agree upon and delineate satisfactory criteria of effectiveness. Indication has been given of the growing belief that only through observation of teachers' behavior in the classroom can meaningful truths regarding the teaching-learning relationship be obtained. It was this evidence which led to the choice of the Ryans instrument





for this study (35) though note was taken of opinion to the effect that other, more costly, observational techniques might produce more reliable and valid data on teacher behavior (29).

In the second section of the chapter research evidence was presented of the growth of a conviction that group climate affects individual members' attitude development and behavior. In addition the effects of multi-group membership were illustrated by research reference. Finally specific reference was made to the emergence of the organizational climate concept and evidence presented of the value for research of the Halpin and Croft OCDQ (20).

The research reviewed in this chapter serves not only to buttress the basic theory for the study but also to support the choice of instruments for the study.



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## CHAPTER V

### METHODOLOGY

In this chapter details of the delineation of population and sample are provided and a general description of the faculties of the sample schools is given. Methods employed in briefing and training observers and in the collection of data are described.

#### I. POPULATION AND SAMPLE

The study was conducted in elementary schools of the Province of Saskatchewan.

##### Population

In the realization that the nature of the relationships to be studied would preclude the obtaining of large numerical measures of them, it was decided to limit the population for the study quite severely in order to minimize the effects of extraneous variables. The population was limited to elementary schools in cities of less than fifteen thousand people or in towns or villages of sufficient size to insure that at least fifty percent of enrolment was drawn from urban homes. All schools were to have at least five and not more than eighteen staff teachers. Each school was to have its own principal, that is, it was to be administratively separate from a high school department or other elementary school so far as the principalship was concerned. Separate schools, as defined under The School Act, and private schools were excluded (2, pp. 21, 22). This procedure established the population at a total of about eighty schools distributed





fairly evenly throughout the settled portion of the province.

Restriction of the population was designed to reduce the effects of such variables as socio-economic differences among school patrons, parental attitudes toward the school, the rural-urban aspect of the location of the school, the economic resources of the school system and related patterns of teachers' salaries and levels of school services, the educational and administrative policies of the school system, and extremes of biographical differences among faculty members. Since this last set of variables was seen to be one which could have considerable interrelation with the two sets of variables with which the study was principally concerned, it was decided to obtain biographical information for all faculty members participating in the study. A biographical information questionnaire sheet was appended to the OCDQ (Appendix B).

### Sampling Procedure

Since the superintendent responsible for each sample school was to be deeply involved in data collection from the school, the first requisite in sampling was to obtain superintendent cooperation. This was done through the investigator's attendance at three zone conferences of superintendents in November, 1962. The potential sample of some sixty schools made possible by the superintendents' willingness to take part in the study was further reduced by the decision to limit to two the number of schools from any superintendency. The limit was imposed in order to avoid too great demands on the time and patience of any superintendent. Random choice was employed to select the two schools in each superintendency. The procedure resulted in a



potential sample of forty-five schools.

Saskatchewan Teachers' Federation Endorsation. Before any approach was made to school faculties, it was deemed appropriate to obtain official endorsement of the study from the Saskatchewan Teachers' Federation, since ratings of teacher classroom behavior were to be an essential source of data. A preliminary copy of the thesis proposal was filed at the STF office and, on December 8, 1962 the Executive passed a resolution endorsing the study.<sup>1</sup>

The Sample. Letters were then sent to the principals of all prospective sample schools outlining the nature of the study and of the involvement of sample school faculties.<sup>2</sup> Principals were requested to discuss participation with their staffs; forty favorable replies were received. One principal indicated his opposition to participation; two others reported that participation had been rejected by staff vote; two schools were not heard from.

The forty schools of the sample were situated in twenty-seven superintendencies. Four small cities, twenty-five towns, and five villages made up the community setting. The four cities and two of the towns contributed two schools each. Seven other superintendencies contained two sample schools, but in different communities. When that portion of the province south of Township 61 was divided into geographically equal quadrants, it was found that seven of the schools were in the North-West, ten in the North-East, nine in the South-West, and

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<sup>1</sup> A copy of the letter received appears in Appendix C.

<sup>2</sup> A copy of the letter to principals is contained in Appendix C.







fourteen in the South-East--a distribution quite similar to the distribution of the delineated population of schools except that the North-West was slightly under-represented and the South-East slightly over-represented.

A frequency distribution by sizes of staffs of the sample schools and the numbers of teachers fully reported on by schools appears in Table V. The column on the right of the Table is the significant one for the remainder of this report because teachers were excluded entirely from the sample if all information on them was not available. This action was necessary in view of the fact that the design of the study required the matching of data relative to the two principal variables, teacher behavior and school climate. It is noteworthy that less than two percent loss resulted from this action.

Table VI shows average biographical characteristics of the teachers and principals in the total sample of schools. It should be noted that the figures relative to teachers are the means of school means, and hence are prone to slight distortion due to the differences in sizes of school staffs.

Though comparisons must be approached with caution because of population differences, there is a notable difference in the experience and tenure figures between the Saskatchewan sample and the elementary schools subsample of the Alberta sample on which the Andrews study was based (1, p. 7). Although the groups mentioned are almost identical as to mean age of teachers and mean number of years of training, the teachers of the Saskatchewan sample average nearly two years more experience and two and one-half years more service in the present school than



TABLE V  
DISTRIBUTION OF SAMPLE SCHOOLS BY STAFF SIZE

Number of Teachers	Frequency of Schools by Total Staff Count	Frequency of Schools by Teachers Fully Reported on
5	4	4
6	1	2
7	7	7
8	6	6
9	6	5
10	1	1
11	5	6
12	3	3
13	3	2
14	-	1
15	2	1
16	1	1
17	1	1
Totals: Schools - 40; Teachers - 380; Teachers Fully Reported on - 374.		





TABLE VI  
SOME CHARACTERISTICS OF THE FACULTIES OF THE SCHOOLS COMPRISING THE SAMPLE  
(N=40)

	Percentage Male	Age	Years of Training	Years of Experience This School	Number on Faculty
Teachers <sup>a</sup>	27.20	36.72	1.61	12.12	5.39
Principals	97.50	41.00	2.93	18.00	8.13
					10.20

<sup>a</sup> Though 374 teachers are included, figures are means of school means.



the teachers of the Alberta elementary schools subsample. This probably indicates a greater "home town" quality in the staffs of the Saskatchewan sample. Married women on staff may have taken off less time to bear their children and raise them. It would appear that the schools of the Saskatchewan sample may be characterized as possessing relatively stable school faculties. It might be expected under these circumstances that both teacher behavior patterns and school organizational climate would be clearly established and would therefore lend themselves well to the type of examination required by the design of this study.

## II. PROCEDURE

### Briefing the Superintendents

The investigator was permitted time at each of the three zone conferences of superintendents mentioned earlier to explain to all superintendents the nature of the study being planned and the role of the superintendents in it. It was explained that a measure of teacher classroom behavior was to be obtained through the averaging of the independent ratings of two superintendents with a time interval of approximately two weeks between ratings. The superintendent in whose area a sample school was located was to be known as the "home superintendent" and was to take charge of all administrative detail required for teacher rating and questionnaire completion in his school. The second rater in each school was to be a neighboring superintendent, to be designated the "visiting superintendent." COR sheets and Glossaries were distributed and a thorough perusal of them and discussion of





their use conducted.

Superintendents were requested to take home the Glossary and a number of COR blanks in order to study the terminology at length and to practise in the use of the COR for some weeks during regular classroom visits to schools other than the prospective sample schools. The superintendents were informed that their objective in practice with the COR was to reach a stage of proficiency such that a test-retest on the same teacher with a two-week time interval between ratings would produce a Pearson product-moment correlation of .80 between the two sets of twenty-two item scores. Guides were provided for the necessary calculations. The superintendents were assured that complete written sets of procedures would be sent to all who would be involved when the sample was finalized.

#### Data Collection

As soon as the sample was finalized, home superintendents were advised and confirmations made of conveniently located visiting superintendents. Kits of directions and testing materials were despatched. The home superintendent's kit contained: (1) complete directions for all phases of procedure in the superintendency, (2) COR sheets and Glossary, (3) OCDQ booklets, (4) faculty code number sheets, (5) sheet for reporting the coefficient of stability attained in practice use of the COR, and (6) a stamped return envelope. Visiting superintendents' kits contained (1) the same direction sheet, (2) COR sheets and Glossary, (3) sheet for reporting the COR stability coefficient, and (4) a stamped envelope for submitting all COR ratings and the stability coefficient sheet to the home superintendent.



The direction sheet sent to all superintendents repeated in detail the procedural steps for practice with and final use of the COR rating sheets. It cautioned against such common rater failings as "central tendency" and "halo effect"; it provided complete directions for every activity expected of both home and visiting superintendent.<sup>3</sup>

### Teacher Self-Ratings

After the foregoing procedures were initiated, it was decided that good use could be made of teacher self-ratings of classroom behavior for comparison with results obtained from superintendent ratings. A letter was sent to the principal of each sample school explaining the additional request for data and asking him to handle distribution of a form letter to teachers, as well as COR blanks and Glossaries and unmarked envelopes in which teachers were to seal their self-rating sheets.<sup>4,5</sup> The principal was asked to retain this material in his own custody until after both superintendents' ratings were completed to avoid any influencing of teachers' behavior during rating periods as a result of extensive knowledge of the COR and its use. He was asked to distribute the material after the final rating period, but before the home superintendent administered the OCDQ so that it could be arranged to have all data collection and remission finalized at one time. The arrangement was that teachers were to complete their self-ratings, seal

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<sup>3</sup> A copy of the direction sheet appears in Appendix C.

<sup>4</sup> Copies of the letters to principals and teachers are contained in Appendix C.

<sup>5</sup> Superintendents also received copies of the letters to principals and teachers.





them in the plain envelopes provided for each, and take these to the final group session at which the OODQ was to be administered. This made possible the placing of appropriate identification numbers on all materials at the same time. At the conclusion of this session, the home superintendent mailed all data collected by superintendents and the principal collected and mailed the teacher self-rating envelopes.

### Response

All of the rather complex arrangements and directions described above were followed with a minimum of difficulty. One superintendent who was acting as both a home superintendent and a visiting superintendent was forced to withdraw from the project before he had completed his visiting superintendent assignment, but no difficulty was experienced in replacing him with another who had already had experience as a visiting superintendent. All forty-seven superintendents involved submitted either the required stability coefficient or a pair of practice ratings from which the investigator could derive the coefficient. No problems were encountered relative to identification numbering or late submission of data.



## REFERENCES FOR CHAPTER V

- (1) Andrews, John H. M. "Some Validity Studies of the OCDQ," paper delivered at the annual convention of the American Educational Research Association, Chicago, February, 1965. (Mimeographed.)
- (2) Saskatchewan Government. The School Act (Regina: The Queen's Printer, 1953).





## CHAPTER VI

### ANALYSIS OF DATA

In this chapter the results of the data collection procedures outlined in Chapter V are recorded and an analysis of the data is presented.

#### I. BIOGRAPHICAL CHARACTERISTICS OF FACULTY MEMBERS

In Chapter V it was indicated that, in spite of efforts made to minimize the influence of variables extraneous to the study, there was a possibility that certain biographical characteristics of faculty members would be significantly related to the two study variables. It was deemed necessary to collect these data and to test their relationship to organizational climate and to patterns of teacher classroom behavior.

##### Procedure

The sample of schools was divided into upper and lower halves on the basis of climate and on the basis of each of the three TCS Patterns in turn. For each of these four situations t-tests were run on the significance of the difference between means of each of the biographical characteristics (3, pp. 136-142).

##### Results

Only one of the forty relationships so tested was statistically significant. It was found that the mean experience of teachers in schools where the teachers received a higher mean TCS Pattern Yo rating (responsible, business-like, systematic teacher behavior) was



significantly greater at the .05 level of confidence than the mean experience of teachers in schools where teachers received a lower mean Yo rating (unplanned, slipshod teacher behavior).

### Discussion

The almost complete absence of significant relationships between biographical variables and the experimental variables indicated sufficient control of biographical variables for the purposes of the experiment. However, because of the salience in school personnel management of such biographical characteristics as age, sex, training, experience, and period of tenure, it was decided to subject the relationships of these to the experimental variables to more rigorous statistical analysis as a supplement to the main study. The reporting of this analysis constitutes Chapter VIII of the thesis.

## II. TEACHER CLASSROOM BEHAVIOR DATA

As has been indicated Ryans' COR was used by superintendents to obtain two sets of twenty-two item general description ratings of the classroom behavior of each staff teacher in the schools of the sample.

### Scoring

Only the scores of the items comprising the TCS Patterns Xo, Yo, and Zo were processed. The final distribution of scores in each pattern was evolved through the following steps.

Since the study was concerned with the relative teacher behavior of different teachers and groups of teachers and not the relative severity of rating of different observers nor the absolute ratings of different teachers, the first step was to standardize the ratings given on







each scale item by each observer (2, pp. 390-91). The T-score form with a mean of fifty and a standard deviation of ten was used (3, p. 222). Using these standardized item scores, pattern scores were derived from each observer's rating of each teacher by adding the appropriate item scores and dividing by the number of items in the pattern (Table I, p. 36). Next the pattern scores for all home superintendents were also standardized. Those for all visiting superintendents were also standardized. Next the corresponding pattern scores for each teacher were averaged. Finally all scores in each pattern were standardized in T-score form.

#### Evaluation of Rater Performance

Indication has been given of the importance of rater performance in providing reliable and valid measures of teacher classroom behavior.

Stability of Assessment. Table VII shows the results of the preliminary training which superintendents undertook. Each superintendent's stability of assessment rating is a Pearson product-moment correlation of the twenty-two COR item scores obtained by doing two ratings of the same teacher with at least a two-week interval between ratings (3, p. 92).

It will be noted that while only some forty-three percent of the raters achieved the .80 goal which was set for them, their general level of achievement was good and compares very favorably with that achieved by Ryans' trained observers (Table III, p. 39). The median stability of assessment rating was .78 and the range was from .88 to .40, with only five raters falling below .60 and only one of these below .50.



TABLE VII

STABILITY OF ASSESSMENT ACHIEVED BY SUPERINTENDENTS  
 BASED ON TWO OBSERVATIONS OF THE SAME TEACHER  
 FOURTEEN DAYS APART PRIOR TO COMMENCEMENT  
 OF RATING IN THE SAMPLE SCHOOLS

Stability Coefficient <sup>a</sup>	Frequency
.90 - .99	--
.80 - .89	20
.70 - .79	14
.60 - .69	8
.50 - .59	4
.40 - .49	1
N=47	

<sup>a</sup> Pearson product-moment correlation.





Reliability of Assessment. As an additional check on rater performance a reliability of assessment test was run for each TCS Pattern in each school. To obtain this measure Pearson product-moment correlations were obtained for each TCS Pattern based on the pattern scores of the two observers in each school. The Pearson  $r$ 's were adjusted according to the Spearman-Brown estimate of reliability formula (3, p. 280).

Table VIII summarizes the results. For TCS Pattern Xo the median reliability coefficient was .70 and the range, .99 to .02, with ten coefficients falling below .50. For Pattern Yo the median was .74 and the range, .99 to .33, with only two coefficients below .50. The median for Pattern Zo was .73, the range .98 to .11, and there were eight coefficients below .50. Comparison with the "elementary composite" item in Table II, page 38, indicates that once again these results compare favorably with those of Ryans.

Discussion. From the foregoing it can be generally concluded that rater performance was of a high order. In both stability of assessment and reliability of assessment Saskatchewan school superintendents exceeded the standard which Ryans accepted from his highly trained observers. From Table L, Appendix D, which gives the complete picture of rater performance, it can be seen that for every one of the forty sample schools a high level of reliability of assessment was achieved on at least one TCS Pattern, and in the majority of cases all three patterns showed high reliability of assessment. Nevertheless, if .50 is chosen as an arbitrary minimum level of acceptance for both stability and reliability coefficients, it is apparent that no less than sixteen of the forty schools drop below the minimum on at least



TABLE VIII

RELIABILITY OF ASSESSMENT OF SUPERINTENDENTS'  
RATINGS OF TCS PATTERNS OF BEHAVIOR

Reliability Coefficient <sup>a</sup>	Number of Pairs of Superintendents		
	Pattern Xo	Pattern Yo	Pattern Zo
.90 - .99	6	10	9
.80 - .89	11	6	4
.70 - .79	3	6	9
.60 - .69	6	9	5
.50 - .59	4	7	5
.40 - .49	2	1	-
.30 - .39	3	1	3
.20 - .29	4	-	4
.10 - .19	-	-	1
0 - .09	1	-	-
negative coefficients	-	-	-
	N= 40	40	40

<sup>a</sup> Spearman-Brown estimates of reliability based correlations between TCS Pattern scores for all teachers in the school.





one of the five measures of stability and reliability applied to the raters, though no school drops below on more than three. Indeed only one school showed three deficient coefficients and only six schools showed two coefficients below .50.

As a result of the somewhat doubtful teacher behavior ratings in sixteen of the sample schools as compared with the highly satisfactory performance in the other twenty-four, it was decided that all hypothesis testing would be conducted for both the full sample and the twenty-four school subsample. Thus a basis for comparison would be established which would provide further evidence regarding the quality of the rating.

One further comment relative to Table VIII is appropriate at this time. It is noteworthy that rater agreement is better for TCS Pattern Yo (systematic, business-like behavior) than for Patterns Xo (understanding, friendly behavior) or Zo (stimulating, imaginative behavior). When tests of significance of difference between proportions were applied to the proportions of each pair of patterns above .50, the difference between Yo and Xo was found to be significant at the .02 level of confidence and the difference between Yo and Zo at the .05 level (3, pp. 146-148). The explanation for the relative superiority of rating of the Yo pattern may lie partly in the greater objectivity of the items which comprise this pattern as compared to the other two, but it is also very likely that superintendents are more sensitive to and concerned with the attributes of a teacher which make him "responsible, business-like, systematic vs. unplanned, slipshod" (7, p. 77). This pattern of behavior is more obviously



related to the goals of the institution. Superintendents, who assume a considerable responsibility for goal achievement, may see as their first concern in observing teacher performance, the judgment of behavior related to goal achievement.

### Teacher Self-Ratings

Teacher self-rating pattern scores were obtained by the simple averaging of the item scores in each pattern. To make these pattern scores comparable with the composite superintendent ratings, scores in each of the three TCS Patterns were standardized across the total sample on a mean of fifty and a standard deviation of ten.

### Rating Comparisons

To obtain a complete picture of the relationships between different sets of ratings, a computer intercorrelation program was employed. Four sets of TCS Pattern scores, the home superintendents' ratings, the visiting superintendents' ratings, the composite ratings, and the teachers' self-ratings, were intercorrelated. The program was used for the 374 teachers in the full forty school sample and for the 231 teachers in the twenty-four school subsample. Table IX shows the pertinent correlations from both runs. Two types of correlations have been included in Table IX: first the correlations between different ratings of the same pattern, and second, correlations between different patterns as rated by the same rater. All other correlations have been omitted to simplify the reading of the table. Both the appropriate headings at the top of the table and those on the left side must be employed in order to identify correlations in either half of the table, but all figures to the right of the diagonal refer to the







to the total sample and all figures to the left of the diagonal refer to the subsample.

Between-Rater Correlations. Over the total sample, visiting superintendent and home superintendent ratings correlated .47 for Xo, .49 for Yo, and .48 for Zo. These figures are close numerical equivalents of the Spearman-Brown reliability coefficients quoted above as measures of the reliability of assessment by the two superintendents.

The corresponding correlations between home and visiting superintendents' ratings for the 231 teachers in the subsample were .59 for Xo, .56 for Yo, and .57 for Zo. These figures support the reservations expressed previously regarding the reliability of ratings in the other sixteen schools. Actually the difference between the Xo correlations was found to be significant at the .05 level of confidence (3, pp. 153-4). The other two showed substantial improvement, but this fell just short of significance. When these three correlations were converted by the Spearman-Brown formula to measures of reliability, they produced the relatively substantial figures of .74 for Xo, .72 for Yo, and .73 for Zo. The disappearance of the superiority in ratings of TCS Pattern Yo which was noted earlier would seem to indicate that the superintendents who operated in the twenty-four schools were not only better raters generally, but were also considerably more sensitive to the human relations and creative aspects of teaching as compared with the more technical and managerial aspects.

In all cases the home superintendents' ratings correlated slightly more highly with the composite ratings than did the visiting superintendents' ratings. The figures were .87 for Xo, .87 for Yo,



TABLE IX

INTERCORRELATIONS OF TCS PATTERN RATINGS<sup>a,b</sup>

		Home Supt.			Visit. Supt.			Comp. Rating			Self-Rating		
		Xo	Yo	Zo	Xo	Yo	Zo	Xo	Yo	Zo	Xo	Yo	Zo
(N=374)													
Home Supt.	Xo		.51	.53	.47			.87			.12		
	Yo	.56		.52		.49		.87			.22		
	Zo	.60	.56			.48		.87			.18		
Visit. Supt.	Xo	.59			.53	.58		.85			.08		
	Yo		.56		.64	.57		.85			.21		
	Zo			.57	.64	.59		.84			.12		
Comp. Rating	Xo	.90			.88			.58	.63		.12		
	Yo		.89		.87			.67	.59		.25		
	Zo			.89		.88		.69	.61		.17		
Self-Rating	Xo	.15			.06			.13			.59	.50	
	Yo		.27		.31			.33			.62	.51	
	Zo			.21		.19		.32	.43	.53			
(N=231)													

<sup>a</sup>Correlations to the right of the diagonal are for the total sample of 40 schools; those to the left of the diagonal are for the subsample of 24 schools in which the best rater reliability record was made.

<sup>b</sup>Only those correlations have been included which show (1) intercorrelations of the same TCS Pattern scores by different raters, and (2) the intercorrelations of different TCS Pattern scores by the same rater.





and .87 for Zo for the total sample as compared with .85, .85, and .84 for the visiting superintendents. For the twenty-four schools the corresponding figures were .90, .89, and .89 compared with .88, .87, and .88. These small differences were due to a conscious process of giving a small arithmetic benefit to the home superintendent figure in the rounding-off process necessary in averaging to produce the composite figure, that is, the rounding-off was done toward the home superintendent's rating in all cases, regardless of whether it was the higher rating.

Teachers' self-ratings are most notable for their very small correspondence with any of the other three sets. They do correspond slightly better with the composite figure than with either home or visiting superintendents' ratings, and they correspond slightly better with the former than the latter, but in no case is the difference significant. The correspondence is slightly better for the restricted sample than the full sample, but in every case the difference is still very great. This lack of relationship between teacher self-ratings and trained observers' ratings is in keeping with the findings of McBeath (5). The weight of evidence indicates that self-ratings are not good measures of teacher classroom behavior. The value they had for this study lay in the fact that they are teachers' own perceptions of their performance. The study was dependent on teachers' perceptions of elements of organizational climate. The relation between these two sets of perceptions could assist in revealing the nature of teacher perception of human interaction in the school social systems. For that reason it was decided to continue with the earlier plan to



test all hypotheses with self-ratings as well as superintendent composite descriptions of teacher behavior.

Correlations of Pattern Scores. Correlations between the sets of pattern scores for the composite ratings were .58 for Xo and Yo, .63 for Zo and Xo, and .59 for Zo and Yo. The corresponding figures for home superintendents were .51, .53, and .52; for visiting superintendents they were .53, .58, and .57; and for teachers' self-ratings, .59, .50, and .51. All figures were slightly higher for the subsample but none was significantly higher.

These figures are in line with Ryans' findings that pattern scores correlate at about the .60 level (7, 106-109). They add evidence to the contentions of Ackerman (1) and the Remmers Committee (6) which were referred to in Chapter I: all teachers possess many competencies in a greater or lesser degree and the effectiveness of any of them in terms of pupil growth is bound up with the behavior of the teacher in interaction with his students. It is not at all surprising that behavior that is judged to be friendly rather than aloof will also be associated with behavior which is responsible rather than slipshod and imaginative rather than routine (7, p. 77). The sizes of the correlations still leave considerable leeway for the appearance of distinctive pattern differences in the relationships with other variables.

### III. ORGANIZATIONAL CLIMATE DATA

Completed OCDQ's were scored and the resulting raw scores processed according to the procedure described in Chapter III.







## Results

Table X summarizes the organizational climate picture for the total sample and Table XI for the twenty-four school subsample. In both cases a bimodal distribution curve resulted with approximately one-quarter of the schools falling in each of the two extreme categories of openness of climate, Open and Closed. A chi square test of the significance of the difference between the two percentage distributions yielded  $\chi^2=1.74$  (3, pp. 165-169). Since with  $df=4$ ,  $\chi^2$  must equal or exceed 9.49 for significance at the .05 level, the two distributions may be considered very similar.

In Table XII the percentage distribution of the climates in the present sample is compared to that obtained by Halpin and Croft with their base sample (4, pp. 92-94). In this case a chi square test yielded  $\chi^2=8.43$ , again below the level for significance.

A comparison of the means and standard deviations of teachers' OCDQ raw subtest scores for the present sample and the Halpin and Croft base sample (4, p. 171) is given in Table XIII. No significant differences between variances were revealed when F-tests were applied (3, pp. 140-142). However, t-tests for the significance of difference between means revealed significant difference at the .05 level for the means of the Intimacy and Consideration subtests, and significance at the .001 level for Disengagement, Hindrance, Aloofness, Production Emphasis, and Thrust. Only Esprit showed no significant difference. The Saskatchewan sample has significantly lower means for Disengagement, Hindrance, Production Emphasis, Thrust and Consideration and significantly higher means for Intimacy and Aloofness.



TABLE X  
CLIMATE CLASSIFICATIONS OF THE SCHOOLS IN THE SAMPLE  
(N=40)

Climates	Schools	Number	%
Open	01, 03, 04, 10, 11, 21, 29, 34, 38	9	22
Autonomous	07, 13, 20, 32, 39, 40	6	15
Controlled	14, 17, 24, 27, 33	5	13
Familiar	15, 08, 30, 35	4	10
Paternal	02, 22, 25, 28	4	30
Closed	06, 09, 12, 15, 16, 18, 19, 23, 26, 31, 36, 37	12	30





TABLE XI  
CLIMATE CLASSIFICATIONS OF THE SCHOOLS IN THE SUBSAMPLE  
(N=24)

Climates	Schools	Number	%
Open	03, 10, 29, 34, 38	6	25
Autonomous	07, 13, 20	3	12.5
Controlled	17, 27, 33	3	12.5
Familiar	30, 35	2	8.5
Paternal	02, 25, 28	3	12.5
Closed	12, 16, 18, 23, 26, 36, 37	7	29



TABLE XII  
SASKATCHEWAN SAMPLE COMPARED WITH HALPIN  
AND CROFT'S SAMPLE ON DISTRIBUTION  
OF ORGANIZATIONAL CLIMATES<sup>a</sup>

Climates	Saskatchewan Sample	Halpin and Croft Sample
Open	22%	24%
Autonomous	15	8
Controlled	13	18
Familiar	10	12
Paternal	10	11
Closed	30	27
Total %	100	100
No. of Schools	40	71

<sup>a</sup> Significance--a 6x2 chi square table for the two distributions resulted in  $X^2=8.43$ . For  $df=4$ ,  $X^2$  must equal or exceed 9.49 for significance at the .05 level.





TABLE XIII

SASKATCHEWAN SAMPLE COMPARED WITH HALPIN AND CROFT'S  
SAMPLE ON MEANS AND STANDARD DEVIATIONS  
OF SUBTEST RAW SCORES<sup>a</sup>

	Saskatchewan Sample (N=374)		Halpin and Croft's Sample (N=1151)	
	Mean	Stan. Dev.	Mean	Stan. Dev.
Disengagement	64.3	3.94	65.9	4.36
Hindrance	67.2	4.62	69.9	5.83
Esprit	80.2	4.54	80.7	5.15
Intimacy	73.3	4.65	72.6	5.14
Aloofness	72.5	3.74	71.5	3.98
Production Emphasis	70.2	5.43	72.2	5.27
Thrust	79.6	6.03	81.8	6.14
Consideration	71.3	6.14	72.2	6.05

<sup>a</sup>Significance: F-tests indicated no significant differences between variances. Significance of difference between means, tested with t-tests, was found for Intimacy and Consideration at the .05 level and for all others except Esprit at the .001 level. Esprit showed no significant difference.



## Discussion

The very close correspondence between organizational climate distributions for the full sample and the twenty-four school subsample indicates that any observed differences in relationships of variables between the full and partial samples are not attributable to unusual differences in climate. This finding tends to support the decision to use caution in interpretation of measures of teacher classroom behavior.

The demonstrated correspondence between climate distributions for the Saskatchewan sample and the Halpin and Croft base sample appears to confirm the applicability of the OCDQ and the Halpin and Croft categorization of climate to the present sample. This assumption is weakened somewhat by the revealed significant differences between mean subtest scores. It should be noted that while these differences are statistically significant, they are in fact numerically quite small. The seeming inconsistency is explainable by taking into account the relative breadth of each of the six climate categories. This is further good reason for the earlier decision to interpret climate categories with caution.

In view of the directions of the measured differences, it can be inferred that the Saskatchewan schools indicate a slightly greater tendency than the base sample toward low principal influence (lower Thrust and Consideration, higher Aloofness) and higher staff cohesiveness (higher Intimacy, lower Disengagement and Hindrance). This is in keeping with the finding reported earlier that the Saskatchewan staffs were relatively stable from the point of view of length of service in the present school. Since many of the older teachers probably





came from a background of service in one room rural schools, their tendency to self-sufficiency may have led them to depend less on the principal than otherwise might be expected.

#### IV. SUMMARY

An examination of faculty biographical characteristics with the main study variables revealed limited evidence of some relationships, but it did not indicate the necessity for further attempts to eliminate the effects of these influences from the hypothesized relationships between the main study variables.

Data gathered through superintendents' use of the Ryans COR provided three composite behavior pattern scores for each teacher in the sample. In addition teachers' self-ratings with the COR provided a parallel set of scores. Reliability and stability of rating tests of the superintendents' ratings led to the decision to test all hypotheses on the basis of a twenty-four school subsample for which ratings were most reliable as well as on the full sample base. Lack of correspondence between teacher self-ratings and other ratings indicated the necessity for great caution in interpretation of hypothesis test results when teachers' perceptions of their own behavior were employed, but it was decided that this admittedly subjective opinion could be of value.

Analysis of organizational climate data gathered through use of the OCDQ indicated the general applicability of the Halpin and Croft norms to the Saskatchewan sample, but produced some evidence of a lower level of principal influence in the establishment of school organizational climate than that envisaged by the authors.



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## CHAPTER VII

### TESTING THE HYPOTHESES

The testing of the hypotheses is described and discussed in the following pages.

#### Hypothesis One

The object of tests of Hypothesis One was to demonstrate the existence of concomitancy of variation between organizational climate and teacher classroom behavior. The three null hypotheses were:

Ho.1a. School organizational climate and staff mean scores on TCS Pattern Xo are unrelated variables.

Ho.1b. School organizational climate and staff mean scores on TCS Pattern Yo are unrelated variables.

Ho.1c. School organizational climate and staff mean scores on TCS Pattern Zo are unrelated variables.

Test One. In strict conformance with the ordinal nature of the climate variable and the demonstrated distribution of climate categories over the sample, a first attempt was made to reveal the hypothesized relationships by the use of chi square tests (4, pp. 165-168). For each of the three sets of pattern scores the school means were divided into top, middle, and bottom thirds. In each case these were matched in a 3x3 contingency table with the three divisions of climate scores, Open and Autonomous, Controlled and Familiar, and Paternal and Closed.

The same three tests were run with the twenty-four school subsample.



Results. Tables XIV and XV show the results of the chi square tests. No significant relationship was revealed although in the case of the subsample, climate and TCS Pattern Yo showed a substantial correspondence, with the probability level reaching .075.

Test Two. Precedents for the use of parametric statistics were set by both Halpin and Croft (5) in the development and application of the OCDQ and by Ryans (7) in work with the COR. The decision to apply parametric statistical tests in attempting to reveal the relationships described in Hypothesis One was encouraged by Andrews' quantification of the climate categories (1). He gave Open climate a weight of six and each lower category a weight of one less down to one for Closed. The second set of tests consisted of running Pearson product-moment correlations between the Andrews quantification of school climates and each of the sets of school mean TCS Pattern scores. Both the full sample and the subsample were so tested.

Test Three. The operation described in Test Two was repeated using Kirk's measure of openness of climate instead of the Andrews quantification (6).

Test Three was repeated using teachers' self-ratings as measures of classroom behavior.

Results. The results of the eighteen subtests under the headings Test Two and Test Three are contained in Tables XVI, XVII, and XVIII. These approaches did not appreciably change the picture presented by the chi square tests. The comparatively substantial correlation of .30 between TCS Pattern Yo and Kirk's measure of openness of climate for the subsample corroborated the previous finding. This





TABLE XIV

CHI SQUARE TESTS OF THE RELATIONSHIP BETWEEN ORGANIZATIONAL  
CLIMATE OF SAMPLE SCHOOLS AND SCHOOL  
MEANS OF TCS PATTERN SCORES  
(N=40)

Variables	Chi Square	Probability Level
Climate and Pattern Xo	4.10 <sup>a</sup>	.40
Climate and Pattern Yo	3.61	.48
Climate and Pattern Zo	2.14	.71

<sup>a</sup> $\chi^2=9.49$  is required for significance at the .05 level  
with df=4.



TABLE XV

CHI SQUARE TESTS OF THE RELATIONSHIP BETWEEN ORGANIZATIONAL  
CLIMATE OF SUBSAMPLE SCHOOLS AND SCHOOL  
MEANS OF TCS PATTERN SCORES  
(N=24)

Variables	Chi Square	Probability Level
Climate and Pattern Xo	2.47 <sup>a</sup>	.65
Climate and Pattern Yo	8.66	.075
Climate and Pattern Zo	1.27	.93

<sup>a</sup> $\chi^2 = 9.49$  is required for significance at the .05 level  
with df=4.





TABLE XVI

CORRELATIONS BETWEEN SCHOOL MEANS OF TCS PATTERN SCORES  
AND MEASURES OF ORGANIZATIONAL CLIMATE  
(N=40)

Measures of Climate	School Means of TCS Pattern Scores		
	Xo	Yo	Zo
Climate <sup>a</sup>	.00	-.04	-.01
Openness of Climate <sup>b</sup>	-.04	-.02	-.12

<sup>a</sup>Climate treated as a continuous variable from Open Climate (6) to Closed Climate (1).

<sup>b</sup>Kirk's Openness of Climate (6, p. 2) is obtained by subtracting the Disengagement score from the sum of the scores for Esprit and Thrust, using school profile figures (ipsative standardization).



TABLE XVII

CORRELATIONS BETWEEN SCHOOL MEANS OF TCS PATTERN SCORES  
AND MEASURES OF ORGANIZATIONAL CLIMATE  
(N=24)

Measures of Climate	School Means of TCS Pattern Scores		
	Xo	Yo	Zo
Climate <sup>a</sup>	-.04	.16	-.10
Openness of Climate <sup>b</sup>	-.01	.30	.16

<sup>a</sup> Climate treated as a continuous variable from Open Climate (6) to Closed Climate (1).

<sup>b</sup> Kirk's Openness of Climate (6, p. 2) is obtained by subtracting the Disengagement score from the sum of the scores for Esprit and Thrust, using school profile figures (ipsative standardization).





TABLE XVIII

CORRELATIONS BETWEEN SCHOOL MEANS OF TCS PATTERN  
SCORES FROM TEACHER SELF-RATINGS AND KIRK'S  
MEASURE OF OPENNESS OF CLIMATE

Sample	School Means of TCS Pattern Scores		
	Xo	Yo	Zo
40 Schools	.06	.02	.07
24 Schools	.08	.16	-.11



trend showed up with the Andrews measure of climate also. The climate-Yo correlation for forty schools was  $-.04$ , but for twenty-four schools it was  $.16$ . Finally, it is noteworthy that with the Kirk figures, the openness of climate-Zo correlation changed from  $-.12$  for forty schools to  $.16$  for twenty-four schools.

Discussion. The null hypotheses must be accepted for all three TCS Patterns.

The marked increase in the probability level of the relationship between climate and pattern Yo from full sample to subsample supported the earlier decision to investigate the effect of using only the best composite ratings of superintendents. These results strongly suggest that a more accurate measure of classroom behavior might have revealed statistically significant relationships between climate and teacher-behavior--at least behavior of the Yo type. This greater probability of correspondence with Pattern Yo is in keeping with theory: in Chapter II it was argued that the influence of organizational climate on classroom behavior was largely in terms of the nomothetic or sociological dimension--the establishment of ideas regarding the goals of the institution and their attainment.

Results with teacher self-tests added nothing of importance to the clarification of the situation.

### Hypothesis Two

Tests for Hypothesis Two were designed to provide analysis of the hypothesized concomitancy of variation between the major variables by relating dimensions or elements of organizational climate to the TCS Pattern scores. Since no significant general relationship was





demonstrated through tests of Hypothesis One, tests of Hypothesis Two became in the first instance, a search for concomitancy of variation between dimensions of climate and behavior patterns. The working hypothesis was:

Ho.2. Dimensions of school organizational climate and staff mean TCS Pattern scores are unrelated variables.

Test One. An electronic computer was used to run intercorrelations between each of the eight school mean OCDQ subtest scores and each of the three school mean TCS Pattern scores. The test was repeated for the twenty-four school subsample. Both tests were also run using school means of teacher self-ratings instead of the superintendents' composite scores.

Results. Tables XIX and XX show results with composite ratings of behavior. No statistically significant correlations appeared for the total sample, but the subtest Disengagement was significantly negatively correlated with the TCS Pattern Yo for the subsample.

There were some interesting comparisons to be made between the two tables. The relationships of Pattern Xo with Disengagement, Intimacy, Thrust, and Consideration showed relative stability of magnitude and direction, but Production Emphasis showed a fairly substantial change in magnitude as well as a change in direction. For the Yo Pattern, stability was indicated for Production Emphasis, Hindrance, and Consideration, while considerable change appeared for Disengagement, Esprit, and Intimacy. In the case of the Zo Pattern, relative stability was apparent in all relationships except those with Production Emphasis and Consideration, and in these cases no significant trend was discernable.



TABLE XIX  
CORRELATIONS BETWEEN SCHOOL MEANS OF TCS PATTERN SCORES  
AND SCHOOL MEANS OF OCDQ SUBTEST SCORES  
(N=40)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	-.09	.21	.02	-.27	-.06	-.18	-.09	-.06
Pattern Yo	-.20	-.13	-.12	-.23	-.09	-.27	.12	-.02
Pattern Zo	.16	.23	-.10	-.10	-.13	.04	-.11	.07





TABLE XX

CORRELATIONS BETWEEN SCHOOL MEANS OF TCS PATTERN SCORES  
AND SCHOOL MEANS OF OCDQ SUBTEST SCORES  
(N=24)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	-.10	.07	-.09	-.28	.07	.03	-.18	-.13
Pattern Yo	<u>-.42<sup>a</sup></u>	-.12	.06	-.00	-.21	-.32	.01	-.06
Pattern Zo	.20	.30	-.19	-.12	-.25	-.04	-.19	-.05

<sup>a</sup> Underlined coefficient is significant at the .05 level of confidence.



Tables XXI and XXII give the correlation results when teacher self-ratings of behavior were used for the TCS Patterns. Esprit and Pattern Xo showed significant relationship for the full sample while Hindrance and Pattern Yo were significantly related for the subsample. As would be expected, there was a high degree of correspondence of results for the full and the subsamples. Though only the two significant correlations were obtained, fairly substantial correlations, all positive, were revealed for all three TCS patterns with both Hindrance and Esprit. Fairly large positive correlations were also obtained for Yo-Thrust and Zo-Disengagement.

Discussion. On the basis of Test One the null hypothesis can be rejected only in the case of the relationship between Disengagement and TCS Pattern Yo, and this only as it applies to the twenty-four school subsample. The significant negative relationship exhibited here is in keeping both with the definitions of the related variables and the underlying theory which suggests a "goal orientation" carry-over from faculty group to classroom.

Any interpretive discussion of the stability or lack of it of the other relationships must be approached with extreme caution because of their lack of significance. About all that can be said about the Xo-Production Emphasis relationship change from the full to the subsample is that more accurate rating appears to eliminate what might have been considered a logical direction of the relationship, and to reinforce the statistical conclusion that there is no relationship between the two. The apparent reinforcement of the negative relationship between Xo and Disengagement is in keeping with theory. The





TABLE XXI

CORRELATIONS BETWEEN SCHOOL MEANS OF OCDQ SUBTEST  
SCORES AND SCHOOL MEANS OF TCS PATTERN SCORES  
OBTAINED FROM TEACHERS' SELF-RATINGS  
(N=40)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	-.00	.18	<u>.31</u> <sup>a</sup>	.17	-.02	.01	.15	.22
Pattern Yo	.11	.25	.25	.04	.03	.07	.27	.06
Pattern Zo	.25	.23	.30	-.00	-.04	.10	.07	.05

<sup>a</sup>Underlined coefficient is significant at the .05 level of confidence.



TABLE XXII

CORRELATIONS BETWEEN SCHOOL MEANS OF OCDQ SUBTEST  
SCORES AND SCHOOL MEANS OF TCS PATTERN SCORES  
OBTAINED FROM TEACHERS' SELF-RATINGS  
(N=24)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	.06	.31	.29	.04	-.04	-.02	.13	.14
Pattern Yo	.13	<u>.46<sup>a</sup></u>	.27	-.00	-.10	.07	.33	.20
Pattern Zo	.28	.31	.20	.10	.10	.22	.04	.21

Underlined coefficient is significant at the .05 level of confidence.





explanation may lie in the possibility that the understanding, friendly teacher actually is either indifferent to or mildly welcomes a climate deficient in these dimensions because his personal needs satisfaction as well as his work satisfaction is found in interaction with his pupils.

The direction of the stable relationships, Yo-Hindrance and Yo-Production Emphasis is in keeping with theory, and the near significance of the latter indicates that the reliable, systematic teacher does better in a climate which leaves him untrammelled by unnecessary directives. The changes in the Yo-Disengagement, Yo-Esprit, and Yo-Intimacy relationships are in directions consistent with theory. It might not be expected, that, for the systematic teacher, the last would be a high positive relationship, but the underlying suggestion that his social needs satisfaction derives from peer relationships rather than classroom relationships is sound.

The portions of the Zo intercorrelation pattern which show stability are in keeping with theory if one pictures the stimulating, imaginative teacher as one who "blossoms" in the classroom situation. The mildly closed climate pattern suggested by the correlations is one which would tend to turn his energies and attention toward his classroom for both work and social needs satisfaction.

For the teacher self-ratings of behavior, all of the stable and relatively high correlations are either in line with theory or are readily rationalized. The approach to explanation is a little different here in view of the fact that in this case teachers' perceptions of climate dimensions are being matched with teachers' perceptions of



their own behavior. It is logical that when teachers rate themselves high on any behavior pattern, they also view their relationships with their colleagues as fairly adequate, hence the comparatively substantial correlations of Esprit with all TCS Patterns. The Yo-Thrust and the Zo-Disengagement relationships mentioned above are in line with theory.

To rationalize the relatively high positive correlations between each pattern and Hindrance it is helpful to remind oneself of the phenomenological theory that man's every act is motivated by a desire to achieve adequacy of self-concept (2). Teachers who rate themselves above average on any behavior pattern are also quite likely convinced that their "success" is largely of their own making, thus they are inclined to consider administrative and supervisory activities of the principal, whether constructive or not, as "burdensome routine" or "unnecessary busy-work", and as hindering their own well-directed efforts. To the extent that thoughts of this sort actually influenced teachers' scoring of the OCDQ, the validity of the OCDQ might be questioned. More is said on this point in connection with the testing of Hypothesis Three.

Test Two. As an extension of the analysis attempted with Test One, use was made of a computer program which provided a multiple regression analysis of OCDQ subtest scores as predictors of the mean TCS Pattern scores. This test was run with both the full sample and the twenty-four school subsample.

Results. The results of Test Two are summarized in Tables XXIII to XXVIII inclusive. In no case was a combination of OCDQ subtests







TABLE XXIII  
MULTIPLE REGRESSION PREDICTION OF TCS PATTERN X<sub>0</sub> SCORES BY CLIMATE SUBTEST SCORES  
(N=40)

Organizational Climate Scores	Correlation with Pattern X <sub>0</sub> Scores	Beta Weight (b <sub>0</sub> =59.73)	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Intimacy	-.27	-.3107	7.13	7.13	.266
Hindrance	.21	.2674	4.25	11.38	.338
Disengagement	-.09	-.1901	4.09	15.47	.394
Consideration	-.06	.1727	1.18	16.66	.409
Production Emphasis	-.18	-.0966	.84	17.50	.418
Thrust	-.09	-.1307	.21	17.71	.421
Esprit	.02	.1060	.67	18.38	.429
Aloofness	-.06	-.0081	.00	18.38	.429



TABLE XXIV  
MULTIPLE REGRESSION PREDICTION OF TCS PATTERN X<sub>0</sub> SCORES BY CLIMATE SUBTEST SCORES  
(N=24)

Organizational Climate Scores	Correlation with Pattern X <sub>0</sub> Scores	Beta Weight (b <sub>0</sub> =74.57)	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Intimacy	-.28	-.3881	7.59	7.59	.276
Disengagement	-.10	-.2162	2.94	10.53	.324
Consideration	-.13	.1138	.20	10.73	.325
Thrust	-.18	-.1351	.49	11.22	.326
Hindrance	.07	.0693	.17	11.39	.326
Aloofness	.07	.0296	.10	11.50	.326
Esprit	-.09	.0427	.05	11.55	.327
Production Emphasis	.03	.0093	.00	11.55	.327





TABLE XXV  
MULTIPLE REGRESSION PREDICTION OF TCS PATTERN YO SCORES BY CLIMATE SUBTEST SCORES  
(N=40)

Organizational Climate Scores	Correlation with Pattern Yo Scores	Beta Weight ( $b_0=90.53$ )	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Production Emphasis	-.27	-.2216	7.55	7.55	.275
Intimacy	-.23	-.2604	3.43	10.98	.332
Disengagement	-.20	-.1832	3.13	14.12	.376
Consideration	-.02	.2562	2.47	16.58	.408
Thrust	-.12	-.1549	2.02	18.60	.432
Hindrance	-.13	-.1008	.61	19.22	.438
Esprit	-.12	-.0764	.55	19.77	.445
Aloofness	-.09	-.0683	.22	19.99	.448



TABLE XXVI

MULTIPLE REGRESSION PREDICTION OF TCS PATTERN YO SCORES BY CLIMATE SUBTEST SCORES  
(N=24)

Organizational Climate Scores	Correlation with Pattern Yo Scores	Beta Weight ( $b_0=95.36$ )	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Disengagement	<u>-.42<sup>a</sup></u>	-.3612	18.01	18.01	<u>.424</u>
Production Emphasis	-.32	-.2571	5.14	23.14	.481
Intimacy	-.00	-.0663	1.92	25.06	.501
Esprit	.06	.4106	2.09	27.15	.521
Thrust	.01	-.3505	3.31	30.47	.552
Alloofness	-.21	-.1262	.71	31.18	.559
Hindrance	-.12	-.0549	.17	31.35	.560
Consideration	-.06	-.0607	.18	31.53	.561

<sup>a</sup>Underlined correlations are significant at the .05 level of confidence





TABLE XXVII  
MULTIPLE REGRESSION PREDICTION OF TCS PATTERN Zo SCORES BY CLIMATE SUBTEST SCORES  
(N=40)

Organizational Climate Scores	Correlation with Pattern Zo Scores	Beta Weight ( $b_0=54.10$ )	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Hindrance	.23	.1517	5.24	5.24	.230
Consideration	.07	.2551	.96	6.20	.249
Intimacy	-.10	-.2024	2.45	8.65	.294
Aloofness	-.13	-.2957	1.59	10.25	.319
Thrust	-.11	-.2273	2.41	12.66	.357
Production Emphasis	.04	.1707	1.76	14.42	.381
Disengagement	.16	.0395	.11	14.52	.381
Esprit	-.10	.0312	.05	14.57	.382



TABLE XXVIII  
MULTIPLE REGRESSION PREDICTION OF TCS PATTERN Zo SCORES BY CLIMATE SUBTEST SCORES  
(N=24)

Organizational Climate Scores	Correlation with Pattern Zo Scores	Beta Weight ( $b_0=51.41$ )	% of Variation Accounted for Stepwise	Cumulative Total % of Variation	Multiple Correlation R
Hindrance	.30	.1866	9.12	9.12	.301
Alloofness	-.25	-.4151	3.13	12.24	.350
Production Emphasis	-.04	.2325	2.38	14.62	.382
Disengagement	.20	.1158	1.04	15.66	.396
Thrust	-.19	-.0645	.74	16.40	.405
Consideration	-.05	.2230	.87	17.26	.416
Intimacy	-.12	-.2082	.64	17.91	.423
Esprit	-.19	-.1162	.29	18.19	.427





shown to be a better predictor of TCS Pattern scores than the subtest yielding the highest single correlation.

Discussion. It is interesting to note that for pattern Xo a higher cumulative total of variance was accounted for by OCDQ dimension relationships for the full sample than for the subsample. Such was not the case for Yo and Zo, and, as was indicated by the tests of Hypothesis One, a substantial increase in total variance of Yo accounted for took place when the sample was reduced.

Another point worthy of comment is the complete absence from the top three predictor positions of the two dimensions Esprit and Thrust which Halpin and Croft (5) identified as key dimensions in establishing the organizational climate of a school. On the other hand, of the four top predictors which did appear, two--Hindrance and Production Emphasis--correspond to two of the three which Feldvebel (3) found to be the best predictors in his study.

### Hypothesis Three

The object of Hypothesis Three was to test the extent and nature of the relationship between teachers' perceptions of the dimensions of organizational climate and their classroom behavior as revealed by their TCS Pattern scores. The null hypotheses were:

Ho.3a. Teachers' OCDQ subtest scores and their TCS Pattern Xo ratings are unrelated variables.

Ho.3b. Teachers' OCDQ subtest scores and their TCS Pattern Yo ratings are unrelated variables.

Ho.3c. Teachers' OCDQ subtest scores and their TCS Pattern Zo ratings are unrelated variables.



Test One. The subtest scores of the eight OCDQ dimensions were intercorrelated with the TCS Pattern scores for the 374 teachers of the full sample and for the 231 teachers of the subsample. For these and all tests of Hypothesis Three, the OCDQ subtest raw scores were standardized across the full sample of teachers rather than across schools as was required to derive the climate profiles.

Test One was also run with teacher self-ratings used to obtain pattern scores.

Results. Of the twenty-four relationships, two--Yo-Aloofness and Zo-Hindrance--showed significant correspondence at the .05 level of confidence in both the full sample and the subsample for composite ratings of teacher behavior. There was a fairly high degree of stability of all relationships between the two samples. Tables XXIX and XXX record the full results.

The results with teachers' self-ratings appear in Tables XXXI and XXII. Significant correspondence was indicated for Yo-Esprit and Zo-Esprit for the full sample. These significant relationships were not revealed in figures for the subsample and several other relationships differed considerably from those for the full sample.

Discussion. On the basis of the results of Test One, the null hypothesis must be accepted for the TCS Pattern Xo and accepted for seven of eight relationships in the cases of patterns Yo and Zo. The significant negative relationship between Yo and Aloofness is in keeping with theory. The systematic, responsible teacher sees the principal's behavior as less formal and universalistic than does the unplanned, slipshod teacher. This may be partly due to the principal's







TABLE XXIX  
CORRELATIONS BETWEEN TEACHERS' OCDQ SUBTEST SCORES  
AND THEIR TCS PATTERN SCORES  
(N=374)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	.03	.07	-.01	-.06	-.06	.01	-.05	.00
Pattern Yo	-.03	.02	.04	-.09	<u>-.16</u> <sup>a</sup>	-.08	-.03	.01
Pattern Zo	.08	<u>.12</u>	-.01	-.03	-.05	.06	-.01	.06

<sup>a</sup> Underlined coefficients are significant at the .05 level.



TABLE XXX  
CORRELATIONS BETWEEN TEACHERS' OCDQ SUBTEST SCORES  
AND THEIR TCS PATTERN SCORES  
(N=231)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	.06	.08	-.04	-.02	-.03	.02	-.09	-.01
Pattern Yo	-.04	.01	.01	-.07	<u>-.13</u> <sup>a</sup>	-.10	-.04	.00
Pattern Zo	.11	<u>.13</u>	-.05	.02	-.04	.09	-.00	.09

<sup>a</sup> Underlined coefficients are significant at the .05 level.





TABLE XXXI

CORRELATIONS BETWEEN TEACHERS' OCDQ SUBTEST SCORES AND TCS  
PATTERN SCORES BASED ON THEIR SELF-RATINGS  
(N=374)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	-.08	-.10	.09	.02	.04	-.01	.07	.08
Pattern Yo	-.08	-.07	<u>.12</u> <sup>a</sup>	.03	-.03	-.04	.08	.09
Pattern Zo	-.03	-.00	<u>.11</u>	-.01	.01	.00	.04	.01

<sup>a</sup> Underlined coefficients are significant at the .05 level.



TABLE XXXII

CORRELATIONS BETWEEN TEACHERS' OCDQ SUBTEST SCORES AND TCS  
PATTERN SCORES BASED ON THEIR SELF-RATINGS  
(N=231)

TCS Pattern Scores	OCDQ Subtest Scores							
	Dis	Hin	Esp	Int	Al	PE	Th	Con
Pattern Xo	-.05	-.00	.04	-.03	.05	.04	.03	.06
Pattern Yo	-.12	-.00	.11	-.09	-.05	-.04	.09	.11
Pattern Zo	.03	.04	-.00	-.04	.09	.06	-.04	.01





actually acting somewhat differently toward the "successful" teacher than toward his less systematic and responsible colleague, but there is good reason to believe that the different perceptions of the "successful" teacher are a result of the "carry-over" of the teacher's success frame of reference into his perceptions of the faculty social system. He views his relations with his principal more optimistically, with greater warmth.

The positive relationship between TCS Pattern Zo and Hindrance is understandable. The creative, imaginative teacher sees any imposition of routine by the principal as a hindrance to his freedom to innovate, to create the best teaching-learning situation in his own way; while at the other end of the scale the teacher whose behavior is rated as dull and routine probably welcomes a certain amount of imposed routine so that by following the directions he will achieve some feeling of accomplishment.

It is worthy of note that the systematic type of teacher showed more concern for principal's Production Emphasis and staff Disengagement than either the friendly or the imaginative types. On the other hand these two showed more concern for principal's Hindrance than did the systematic teacher. These results are quite in keeping with theory.

Turning attention to results with teacher self-ratings, the appearance of relatively high correlations between Esprit and all three TCS Patterns, those with Yo and Zo being significant, is quite understandable. Those teachers who are confident and optimistic enough to rate themselves highly on teacher behavior characteristics are also likely to view faculty interaction as satisfying. Support for this



view can be drawn, cautiously it is true, from the fact that there were also mainly positive correlations between pattern scores and each of Consideration and Thrust and negative correlations for Disengagement and Hindrance. It is a little surprising that the correspondence between figures for the subsample and for the full sample was not more definite, but with such over-all low levels of intercorrelation, complete stability could hardly be expected, especially in view of the small size of the subsample.

Test Two. To test the possibility that there might be curvilinearity in the hypothesized relationships, all composite TCS Pattern scores which differed by one standard deviation or more from the pattern score mean were isolated and the corresponding OCDQ dimension scores for these teachers were recorded. The means of the dimension scores for the high scoring teachers were compared with the means for the teachers who were rated low on the behavior patterns by testing for significance between means with t-tests (4, pp. 136-138).

Results. Tables XXXIII and XXXIV record the results of Test Two for the forty schools and the twenty-four schools respectively. A positive difference indicates that the OCDQ subtest score mean for the teachers rating high on TCS Patterns of behavior exceeded that for low scoring teachers, and a negative difference indicates the reverse relationship.

A difference significant at the .01 level of confidence was revealed for the Yo-Aloofness relationship and a difference significant at the .05 level for Zo-Aloofness, both for the full sample only. With the subsample a significant difference appeared for the Yo-Production







TABLE XXXIII

DIFFERENCES BETWEEN MEANS OF OCDQ SUBTEST SCORES OF TEACHERS  
 RATING HIGH<sup>a</sup> OR LOW<sup>b</sup> ON TCS PATTERN SCORES  
 (40 SCHOOLS)

TCS Pattern Scores	Differences Between Means								Number of Teachers	
	Dis	Hin	Esp	Int	Al	PE	Th	Con	High	Low
Xo	2.7	3.0	.8	-.9	-1.6	-1.6	-1.6	-.4	54	48
Yo	-2.6	2.3	1.4	-3.3	<u>-5.9</u> <sup>c</sup>	-4.1	-.8	0	38	50
Zo	.4	2.2	2.3	-.1	<u>-4.3</u>	2.4	3.1	3.9	42	52

<sup>a</sup>High means one standard deviation or more above the mean.

<sup>b</sup>Low means one standard deviation or more below the mean.

<sup>c</sup>Single underlining denotes significance at the .05 level and double underlining, significance at the .01 level.



TABLE XXXIV

DIFFERENCES BETWEEN MEANS OF OCDQ SUBTEST SCORES OF TEACHERS  
 RATING HIGH OR LOW ON TCS PATTERN SCORES  
 (24 SCHOOLS)

TCS Pattern Scores	Differences Between Means								Number of Teachers	
	Dis	Hin	Esp	Int	Al	PE	Th	Con	High	Low
Xo	2.6	2.3	-.7	.1	-1.2	.3	-2.4	-.3	42	37
Yo	-1.3	2.9	1.5	-1.6	-4.0	<u>-5.0</u> <sup>a</sup>	-1.8	-1.2	27	30
Zo	1.0	1.1	-.7	1.0	-2.6	3.2	4.7	4.3	26	36

<sup>a</sup> Underlined coefficient is significant at the .05 level.





Emphasis relationship. It is perhaps also worthy of note that fairly substantial positive differences occurred for Xo-Disengagement, Xo-Hindrance, Yo-Hindrance, Zo-Hindrance, Zo-Esprit, Zo-Production Emphasis, Zo-Thrust, and Zo-Consideration, and substantial negative differences for Yo-Disengagement, Yo-Intimacy, and Yo-Production Emphasis, though none of these was at the level of significance.

Though there were differences between results for the full sample and the subsample, no change was at a level of significance. Perhaps most noteworthy here are the disappearance of the significant relationships which showed with the full sample and the appearance of a significant Yo-Production Emphasis relationship and a nearly significant Zo-Thrust relationship (.06 level of confidence).

Discussion. The significant relationships and the other noted higher ones are all either in line with theory or are readily rationalized. The only one of the twenty-four relationships which gave a definite indication of curvilinearity was the Zo-Thrust relationship. It showed almost a zero correlation under Test One. The relationship revealed here is in the direction theory would suggest: creative, imaginative teachers view the principal's motivational efforts more favorably than dull, routine teachers do. However, not too much weight can be placed on this result. In the first place the relationship did not achieve the statistically significant level. Secondly the degree of instability and the general low level of the relationships revealed by the twin tables does not inspire strong confidence. Third, the TCS Pattern Zo is undoubtedly the least valid and reliable pattern since it is based on only two of the twenty-two behavior items in the COR (7, p. 77).



OCDQ Validity. The suggestion was made in discussion of Test One of Hypothesis Two that one must take some cognizance of the reason for teachers' scoring OCDQ test items as they do in judging the validity of the OCDQ. The inference was made that if a teacher scores the principal high on Hindrance because it bolsters the teacher's ego to downgrade the principal's contribution to the successful operation of the school, then, to the extent that all or any of the teachers in the school do this, the Hindrance measure for that school is of doubtful validity.

The tests for Hypothesis Three provide a basis for pursuing this argument further. Here it has been possible to relate teachers' perceptions of dimensions of organizational climate with measures of their classroom behavior. Had a large part of the variance in teachers' OCDQ dimension scores been shown as attributable to the degree of "success" in the classroom, it might have been argued that organizational climate is little more than a function of classroom performance. No such close relationships have been revealed either with independent ratings of teacher behavior or with teachers' self-ratings, hence there is no firm basis for any criticism of the validity of the OCDQ.

### Summary

The three tests employed to investigate the general hypothesis of concomitancy of variation between school organizational climate and teacher classroom behavior failed to produce a basis for rejection of the null hypotheses. However, the marked increase in the climate-Pattern Yo correlations from the full sample to the subsample was construed as evidence that more accurate judgment of teacher classroom







behavior might well reveal a direct relationship between openness of climate and teacher behavior described as responsible, business-like, systematic vs unplanned, slipshod.

Tests of Hypothesis Two which were designed to test relationship between behavior patterns and climate dimension revealed only one significant relationship, that between Pattern Yo and Disengagement. This relationship and the finding that climate dimensions accounted for a greater percentage of the total variance of Pattern Yo than of other patterns of behavior serve to support the suggestion for a goal-orientation carry-over of influence from faculty to classroom which was made on the basis of theory.

Tests of Hypothesis Three for relationships between teachers' perceptions of climate dimensions and their pattern scores revealed a significant negative relationship between Pattern Yo and Aloofness and a significant positive Zo-Hindrance correlation. These findings, together with the finding under Hypothesis Two that the best predictors of climate are Disengagement, Hindrance, Production Emphasis, and Intimacy, might be construed as supporting the earlier suggestion that the principals of the sample exert a somewhat lower positive influence on climate than might be expected.

The relatively high correlations between patterns of behavior based on teachers' self-ratings and Hindrance may be taken as further support for this indication. It appears, however, that teachers who rated themselves favorably on behavior did take a moderately positive view of other elements of climate, indicated by positive correlations involving Esprit, Thrust, and Consideration.



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## CHAPTER VIII

### FACULTY BIOGRAPHICAL CHARACTERISTICS, SCHOOL ORGANIZATIONAL CLIMATE, AND TEACHER CLASSROOM BEHAVIOR

The results of t-tests to ascertain the relationship between biographical characteristics of faculty members and the study variables was discussed in Chapter VI. It was concluded that there was sufficient independence of school means of the study variables from biographical characteristics to proceed with hypothesis testing without further control of biographical variables. It was recognized, however, that relationships did exist which would hold useful information for administrators. The exploration of these relationships is described and discussed in this chapter.

#### The Basic Tests

Table XXXV shows the full results of the t-tests referred to in Chapter VI. The only significant relationship revealed was that between school mean Pattern Yo scores and teachers' experience, but several fairly substantial values of t appeared indicating the merit of more detailed study of the individual relationships.

#### Intercorrelations with Climate, Openness of Climate, and Climate Dimensions

The Andrews measure of climate, the Kirk measure of openness of climate, and the school mean OCDQ dimension scores were intercorrelated with the school means of faculty biographical characteristics (1, 2).



TABLE XXXV

TESTS<sup>a</sup> FOR THE SIGNIFICANCE OF THE DIFFERENCE BETWEEN MEANS OF  
 BIOGRAPHICAL CHARACTERISTICS OF FACULTY MEMBERS IN THE  
 UPPER HALF AND THE LOWER HALF OF THE SAMPLE  
 DIVIDED ON THE BASIS OF CLIMATE AND  
 OF EACH TCS PATTERN  
 (N=40)

Biographical Characteristics	Values of t			
	Climate	Pattern Xo	Pattern Yo	Pattern Zo
Percentage Male	1.094	1.053	.509	.408
Age (T) <sup>b</sup>	1.273	1.858	1.753	.457
Training (T)	.368	.208	.213	1.383
Experience (T)	.047	2.008	<u>2.157</u> <sup>c</sup>	1.757
Yrs. this School (T)	.185	.094	.576	1.037
Age (P) <sup>d</sup>	.409	.517	.103	1.957
Training (P)	1.534	1.025	1.508	.777
Experience (P)	.501	.173	.178	.702
Yrs. this School (P)	.656	1.269	.309	1.929

<sup>a</sup>Test of significance used was the t-test: df=38, two-tailed; t=2.024 required for significance at the .05 level.

<sup>b</sup>T stands for teachers.

<sup>c</sup>Underlined value significant at the .05 level of confidence.

<sup>d</sup>P stands for principals.





Results, Tables XXXVI and XXXVII record the results of this test for the full sample and the twenty-four school subsample. A nearly significant relationship between climate and principal's period of service in the present school for the full sample became a relationship significant at the .01 level for the subsample. Significant negative relationship between principal's experience and Hindrance appeared for both samples, as did significant positive relationship between principal's service in the present school and Esprit. The relationship Consideration-principal's service in the present school was at the level of significance for the full sample but appeared just below that level for the subsample. The relationship Hindrance-principal's service in the present school fell short of significance for the full sample but was significant at the .01 level for the subsample.

Discussion. The apparent lack of stability of the two last-cited relationships involving principal's service in the present school is not a source of consternation. With the relatively small number involved, the inclusion or exclusion of three or four long-service principals could easily account for the change. More remarkable is the high degree of stability of the over-all relationship pattern. This would seem to indicate that considerable reliance might be placed on the demonstrated significant relationships. It would appear that the characteristics of principals are of considerably more relevance to the establishment of dimensions of climate than those of staff members, and that period of service in the present school is the key characteristic in this regard. As the principal's tenure in his school increases, his own Thrust and Consideration seem to increase, his Hindrance to



TABLE XXXVI

CORRELATIONS BETWEEN SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND ORGANIZATIONAL  
CLIMATE, OPENNESS OF CLIMATE, AND  
DIMENSIONS OF CLIMATE  
(N=40)

Climate Variables	Characteristics								
	%	Teachers					Principals		
		Age	Train- ing	Exper- ience	Yrs. this School	Age	Train- ing	Exper- ience	Yrs. this School
Climate <sup>a</sup>	-.02	.13	-.03	-.02	-.04	-.05	-.10	-.07	.29
Openness of Cl. <sup>b</sup>	-.03	.22	-.13	.10	.06	.05	-.12	.00	.20
Dis	-.05	-.22	.28	-.08	-.11	-.04	.31	-.08	-.01
Hin	-.02	.04	.21	.12	-.12	-.24	.12	<u>-.36<sup>c</sup></u>	-.29
Esp	-.14	.19	.24	.16	-.01	.16	-.00	.05	<u>.34</u>
Int	-.14	.08	.17	-.05	.04	-.07	.07	-.25	.04
Al	-.09	.02	-.19	.04	-.03	-.09	.02	.09	.17
PE	-.01	-.15	-.04	-.20	-.16	.08	.10	.06	.29
Th	-.19	.00	-.03	-.12	-.04	.08	-.07	-.05	<u>.38</u>
Con	-.10	.06	.05	-.07	.06	.11	.03	-.00	<u>.34</u>

<sup>a</sup>Andrews' measure of climate (1).

<sup>b</sup>Kirk's measure of openness of climate (2).

<sup>c</sup>Underlined correlations are significant at the .05 level.





TABLE XXXVII

CORRELATIONS BETWEEN SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND ORGANIZATIONAL  
CLIMATE, OPENNESS OF CLIMATE, AND  
DIMENSIONS OF CLIMATE  
(N=24)

Climate Variables	Characteristics								
	Teachers					Principals			
	% Male	Age	Train- ing	Exper- ience	Yrs. this School	Age	Train- ing	Exper- ience	Yrs. this School
Climate <sup>a</sup>	-.06	.34	-.03	.19	.17	-.04	-.13	.06	<u>.56</u> <sup>b</sup>
Openness of Cl. <sup>c</sup>	-.03	.40	-.10	.33	.29	.11	-.20	.19	.36
Dis	.03	-.39	.26	-.25	-.28	-.08	.37	-.14	-.13
Hin	.34	-.06	.25	.08	-.09	-.40	.24	<u>-.47</u>	<u>-.53</u>
Esp	-.02	.15	.17	.10	.04	.23	.09	.22	<u>.50</u>
Int	-.24	.01	.02	-.04	-.09	.06	-.14	-.03	.22
Al	-.23	.03	-.24	-.07	-.08	-.08	.04	.10	.09
PE	.22	-.24	-.09	-.26	-.38	-.04	.27	.17	.21
Th	-.08	.01	-.06	-.07	-.04	-.08	.01	-.10	<u>.42</u>
Con	-.27	-.02	.06	-.14	-.08	.05	-.00	.02	.40

<sup>a</sup> Andrews' measure of climate (1).

<sup>b</sup> Single underlining indicates significance at the .05 level and double underlining at the .01 level of confidence.

<sup>c</sup> Kirk's measure of openness of climate (2).



decrease, and staff Esprit to climb, with the result that the over-all organizational climate of the school becomes more open.

#### Relationship with TCS Patterns

School mean TCS pattern scores were intercorrelated with the nine faculty biographical characteristics. The test was run for both the full sample and the subsample, and the two runs were repeated using TCS Pattern scores derived from teachers' self-ratings of classroom behavior.

Results. Tables XXXVIII, XXXIX, XL, and XLI contain the results of these tests. Significant correlations were found for the full sample between Yo and mean age of teachers, Yo and mean experience of teachers, and Yo and mean teacher tenure in the present school, the last relationship being significant at the .01 level of confidence. There was a high degree of stability from the full sample to the subsample, though in the latter the Yo-teachers' age figure dropped below the level of significance and the Yo-teachers' tenure figure showed significance at only the .05 level instead of the .01 level.

With teachers' self-ratings of behavior, significant relationships appeared for Xo-teachers' training, Xo-teachers' experience, Yo-teachers' experience, and Zo-teachers' experience. All of these were just below the level of significance for the subsample, though their absolute values were either undiminished or only slightly reduced.

Discussion. It is, of course, entirely logical that any significant relationships between biographical characteristics and TCS Pattern scores should appear for teacher characteristics rather than for principal characteristics, since the relationships with the latter





TABLE XXXVIII

CORRELATIONS OF SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND SCHOOL  
MEANS OF TCS PATTERN SCORES  
(N=40)

TCS Pattern Scores	Characteristics								
	%	Teachers				Principals			
		Age	Train- ing	Exper- ience	Yrs.this School	Age	Train- ing	Exper- ience	Yrs.this School
Xo	-.26	.11	-.03	.15	.03	.11	.16	.10	-.07
Yo	-.10	<u>.34<sup>a</sup></u>	-.17	<u>.35</u>	<u>.45</u>	.16	.03	.26	.13
Zo	-.15	-.16	.06	-.03	-.20	.20	.07	.09	-.02

<sup>a</sup>Single underlining denotes significance at the .05 level and double underlining at the .01 level of confidence.



TABLE XXXIX

CORRELATIONS OF SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND SCHOOL  
MEANS OF TCS PATTERN SCORES  
(N=24)

TCS Pattern % Scores	Characteristics								
	Male	Age	Teachers			Principals			Yrs.this School
			Train- ing	Exper- ience	Yrs.this School	Age	Train- ing	Exper- ience	
Xo	-.28	-.05	.01	.03	-.00	.18	.26	.17	-.19
Yo	-.07	.29	-.03	<u>.41</u> <sup>a</sup>	<u>.43</u>	.28	.01	.32	.15
Zo	-.20	-.25	.14	-.09	-.30	.22	.15	.15	-.18

<sup>a</sup>Underlining denotes significance at the .05 level of confidence.





TABLE XL

CORRELATIONS OF SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND SCHOOL  
MEANS OF TCS PATTERN SCORES BASED ON  
TEACHERS' SELF-RATINGS  
(N=40)

TCS Pattern Scores	%	Characteristics							
		Teachers				Principals			
		Age	Train- ing	Exper- ience	Yrs. this School	Age	Train- ing	Exper- ience	Yrs. this School
Xo	.02	.28	<u>.36</u> <sup>a</sup>	<u>.32</u>	.31	.04	-.14	-.00	-.02
Yo	-.11	.29	.29	<u>.40</u>	.25	-.02	.08	-.04	.10
Zo	-.10	.30	.19	<u>.39</u>	.26	.09	.04	.12	.17

Underlined coefficients are significant at the .05 level.



TABLE XLI

CORRELATIONS OF SCHOOL MEANS OF CERTAIN BIOGRAPHICAL  
CHARACTERISTICS OF FACULTY MEMBERS AND SCHOOL  
MEANS OF TCS PATTERN SCORES BASED ON  
TEACHERS' SELF-RATINGS  
(N=24)

TCS Pattern % Scores	Characteristics								
	Male	Teachers				Age	Principals		
		Age	Train- ing	Exper- ience	Yrs. this School		Train- ing	Exper- ience	Yrs. this School
Xo	-.10	.30	.36	.28	.23	-.21	-.03	-.25	-.11
Yo	.07	.21	.32	.26	.10	-.22	.34	-.32	-.17
Zo	.03	.21	.18	.26	.12	-.19	.40	-.15	-.05





are only indirect. The fact that significant relationships between biographical characteristics and climate and its dimensions showed up only for principal's characteristics, and that with the TCS Patterns the significant relationships were only with teacher characteristics, supports the decision recorded earlier to assume that the effects of biographical variables on the hypothesized relationships of the study were sufficiently controlled to proceed with the study without further controls.

It seems reasonable, too, that age, experience, and years in the present school should correlate more highly with Pattern Yo scores than with Xo and Zo, since it would be expected that a teacher's responsibility and technical skill would improve with experience, whereas one would not necessarily expect that of his friendliness toward pupils or his imaginativeness in teaching. The rather disconcerting part of this picture is that years of professional training was shown as being so completely unrelated to any pattern of teacher behavior.

Ratings based on teacher self-ratings did not show quite such a definite bias against the relationship of training with classroom performance. While only Xo-training appeared as a significant relationship, the other patterns were also fairly substantially related with training. As was noted with the composite ratings of behavior, experience again appeared as comparatively highly related with classroom behavior. Years of service in the school and age were reasonably substantially correlated with all three patterns, though not significantly so. Though it is encouraging that teacher opinion resulted in training being given a somewhat more favorable status among the measured



relationships, relatively little weight may be placed on the finding because of the generally questionable reliability of such subjective ratings.

#### Relationships for the Teacher Sample and Subsample

All of the intercorrelations described in the two preceding sections were repeated for the teacher sample as a whole and the subsample as a whole. By this means the effects of averaging for schools of different sizes were removed from the results. With climate dimensions, the tests now showed directly the relationships with teachers' perceptions of these dimensions.

Results. Tables XLII and XLIII show the correlations between teachers' perceptions of climate dimensions and the faculty biographical characteristics. Of the seventy-two relationships eleven were significant at the .01 level and five more at the .05 level for the full sample. For the subsample, two more significant correlations appeared, but one disappeared, for a net gain of one. There was a high level of stability from the full to the subsample.

Tables XLIV and XLV show results for the intercorrelations of teachers' TCS Pattern scores with their biographical characteristics. Pattern Yo related significantly with all characteristics for the full sample, all but the correlation with training being at the .01 level of confidence. This result was maintained for the smaller sample, except that the correlation Yo-training fell below the level of significance. No significant relationships appeared for either of the other patterns.

Tables XLVI and XLVII show the results of the same







TABLE XLII

RELATIONSHIP BETWEEN TEACHERS' STANDARDIZED OCDQ SUBTEST  
SCORES AND BIOGRAPHICAL CHARACTERISTICS OF  
TEACHERS AND PRINCIPALS  
(N=374)

Teachers' Characteristics									
OCDQ			Teachers			Principals			
Subtest Scores	Sex	Age	Train- ing	Exper- ience	Yrs.this School	Age	Train- ing	Exper- ience	Yrs.this School
Dis	<u>-.15</u> <sup>a</sup>	<u>-.19</u>	.01	<u>-.17</u>	-.08	-.01	.08	-.04	-.01
Hin	-.03	-.02	-.03	.00	.02	<u>-.12</u>	<u>.11</u>	<u>-.18</u>	<u>-.16</u>
Esp	<u>.18</u>	<u>.20</u>	-.03	<u>.18</u>	<u>.12</u>	.04	-.03	.00	<u>.15</u>
Int	.01	-.04	-.01	-.05	-.04	-.03	.00	-.09	.02
A1	.01	.04	-.02	.04	-.01	-.05	-.02	.01	-.01
PE	.04	-.01	-.09	-.03	-.05	-.03	<u>.11</u>	.01	<u>.12</u>
Th	.05	.04	-.06	-.03	-.01	-.04	-.06	-.09	<u>.21</u>
Con	-.05	.07	-.05	.04	-.00	.02	.01	-.02	<u>.16</u>

<sup>a</sup>Double underlining denotes coefficients significant at the .01 level; single underlining denotes coefficients significant at the .05 level of confidence.



TABLE XLIII  
RELATIONSHIPS BETWEEN TEACHERS' STANDARDIZED OCDQ SUBTEST  
SCORES AND BIOGRAPHICAL CHARACTERISTICS OF  
TEACHERS AND PRINCIPALS  
(N=231)

Teachers'			Characteristics						
OCDQ			Teachers			Principals			
Subtest			Train-	Exper-	Yrs.this		Train-	Exper-	Yrs.this
Scores	Sex	Age	ing	ience	School	Age	ing	ience	School
Dis	<u><u>-.28<sup>a</sup></u></u>	<u><u>-.23</u></u>	.04	<u><u>-.20</u></u>	<u><u>-.13</u></u>	-.04	.11	-.07	-.09
Hin	<u><u>-.13</u></u>	-.02	-.03	.00	-.02	<u><u>-.20</u></u>	<u><u>.16</u></u>	<u><u>-.23</u></u>	<u><u>-.24</u></u>
Esp	<u><u>.21</u></u>	<u><u>.20</u></u>	-.09	<u><u>.14</u></u>	.12	.04	.00	.04	<u><u>.21</u></u>
Int	-.02	-.03	-.01	-.03	.00	-.02	-.07	-.02	.11
Al	.01	.04	-.02	.04	-.01	-.02	-.06	.04	-.03
PE	-.05	-.03	-.09	-.02	-.07	-.04	<u><u>.16</u></u>	.08	<u><u>.14</u></u>
Th	.07	.03	-.08	-.02	-.00	-.10	-.05	-.10	<u><u>.31</u></u>
Con	-.09	-.00	-.09	.02	.01	-.02	.01	-.01	<u><u>.21</u></u>

<sup>a</sup>Double underlining denotes coefficients significant at the .01 level of confidence; single underlining denotes significance at the .05 level.





TABLE XLIV  
CORRELATIONS BETWEEN TEACHERS' TCS PATTERN SCORES AND  
CERTAIN OF THEIR BIOGRAPHICAL CHARACTERISTICS  
(N=374)

TCS Pattern Scores	Characteristics				
	Sex	Age	Training	Experience	Yrs. in this School
TCS Pattern Xo	.10	.09	.06	.08	.09
TCS Pattern Yo	<u>.16</u> <sup>a</sup>	<u>.28</u>	<u>.11</u>	<u>.27</u>	<u>.33</u>
TCS Pattern Zo	.08	.08	.02	.08	.11

<sup>a</sup> Double underlining denotes significance at the .01 level, single underlining at the .05 level.



TABLE XLV  
CORRELATIONS BETWEEN TEACHERS' TCS PATTERN SCORES AND  
CERTAIN OF THEIR BIOGRAPHICAL CHARACTERISTICS  
(N=231)

TCS Pattern Scores	Characteristics				
	Sex	Age	Training	Experience	Yrs. in this School
TCS Pattern Xo	.09	.07	.09	.08	.12
TCS Pattern Yo	<u>.19<sup>a</sup></u>	<u>.29</u>	.12	<u>.28</u>	<u>.35</u>
TCS Pattern Zo	.02	.00	.00	.02	.09

<sup>a</sup> The underlined coefficients are significant at the .01 level.





TABLE XLVI  
CORRELATIONS BETWEEN CERTAIN BIOGRAPHICAL CHARACTERISTICS  
OF TEACHERS AND THEIR TCS PATTERN SCORES BASED  
ON THEIR SELF-RATINGS OF BEHAVIOR  
(N=374)

TCS Pattern Scores	Characteristics				Yrs. this School
	Sex	Age	Training	Experience	
TCS Pattern Xo	-.06	<u>.19</u> <sup>a</sup>	.06	<u>.13</u>	<u>.11</u>
TCS Pattern Yo	<u>.11</u>	<u>.28</u>	.09	<u>.23</u>	<u>.20</u>
TCS Pattern Zo	.09	<u>.19</u>	.09	<u>.17</u>	<u>.17</u>

<sup>a</sup> Double underlining denotes significance at the .01 level;  
single underlining denotes significance at the .05 level.



TABLE XLVII

CORRELATIONS BETWEEN CERTAIN BIOGRAPHICAL CHARACTERISTICS  
OF TEACHERS AND THEIR TCS PATTERN SCORES BASED  
ON THEIR SELF-RATINGS OF BEHAVIOR  
(N=231)

TCS Pattern Scores	Characteristics				
	Sex	Age	Training	Experience	Yrs. this School
TCS Pattern Xo	.00	<u>.21</u> <sup>a</sup>	.07	<u>.15</u>	<u>.15</u>
TCS Pattern Yo	.12	<u>.31</u>	.08	<u>.26</u>	<u>.24</u>
TCS Pattern Zo	<u>.17</u>	<u>.19</u>	.08	<u>.16</u>	<u>.18</u>

<sup>a</sup> Double underlining denotes significance at the .01 level;  
single underlining denotes significance at the .05 level.





intercorrelation run with TCS patterns based on teachers' own ratings of their classroom behavior. Of fifteen relationships, seven were significant at the .01 level and three more at the .05 level for the full sample. These numbers were maintained for the subsample, though there were three changes in the distribution. Over-all stability is high, however.

Discussion. The comparatively close relationship between principal's period of service in the school and dimensions of climate revealed by the intercorrelations of school means was even more clearly demonstrated when direct comparison with individual teachers' perceptions of climate dimensions was made. Indeed the number of significant relationships with principals' period of service in the present school rose from three to five. All correlations were in the expected direction and all indicated that longer principal tenure is likely to be accompanied by more open organizational climate. The positive relationship with Production Emphasis, significant at the .05 level, is a possible exception to this generalization, though not necessarily so. Of the four other significant relationships between characteristics of principals and elements of climate, two (Hindrance-age, and Hindrance-experience) were in the expected direction, and two (Hindrance-training and Production Emphasis-training) were somewhat surprising. Both of these last two were positive, suggesting that the more highly trained the principal, the more likely staff members are to describe principal's Hindrance and Production Emphasis as high. It would appear that highly trained principals tend to be strongly goal oriented, and that they require experience, particularly service in the same school



to temper this drive with concern for the personal need-dispositions of staff.

Contrary to the picture presented by Tables XXXVI and XXXVII (pages 146 and 147), Tables XLII and XLIII indicated several significant correlations between teacher characteristics and elements of climate, particularly Disengagement and Esprit. Male teachers, older teachers, and more experienced teachers appeared to rate Disengagement lower and Esprit higher than their female, younger, and more experienced counter-parts. This may indicate that, according to teachers' perceptions of dimensions of climate, the presence on staff of more men, more older teachers, and more experienced teachers might be expected to result in a more open climate in the school. There would appear to be a possibility that the relationships involving the apparent favoring of the male, and even of the older and more experienced teachers, may be subject to a general cultural influence which affects teachers' perceptions in these directions. Further evidence of persistence of the pioneer society's tradition of male dominance appears in the still overwhelming proportion of male principals in schools.

Intercorrelations across the full teacher sample and subsample of TCS Patterns with biographical characteristics (Tables XLIV and XLV) confirmed and extended the relationships between Pattern Yo and these characteristics which were revealed when school means were compared (Tables XXXVIII and XXXIX, pages 149 and 150). It is noteworthy that, once again, training had the least relationship with teacher behavior of all of the five biographical characteristics, although it did achieve significant correlation at the .05 level for the full sample.







Generally speaking, greater age, experience, tenure in the school, and training accompany higher ratings on all patterns of behavior, though only with Pattern Yo was significance established. Furthermore male teachers appeared to rate higher on all patterns, again significantly for Yo, the responsible, systematic, business-like sort of behavior.

With teacher self-ratings, the strong relationships of biographical characteristics with Pattern Yo were maintained, but a number of significant relationships with other patterns appeared also. According to the teachers' own ratings of their classroom behavior, greater age, experience, and service in the school are accompanied by improved performance in all patterns of classroom behavior, while there is less definite agreement that male teachers may be expected to be more responsible, business-like and systematic and also more stimulating, imaginative, and surgent than female. Contrary to the findings based on school means (Tables XL and XLI, pages 151 and 152) teachers generally appeared to agree with the findings based on superintendent composite ratings, that training is least related with classroom performance of all the tested characteristics.

Once again it is possible that the general cultural bias which tends to encourage perception of male superiority may be exerting some influence in the apparent favorable view of male performance in the classroom indicated by both superintendents and self-ratings. It is possible too that selection is a factor here. The generally lower percentage of male teachers in the elementary schools of the sample may indicate that those who are there have made this choice because of strong motivation and that they are particularly well suited to work in



this environment.

### Summary

Understandably, biographical characteristics of principals in the sample were shown to be more closely related to climate and its dimensions than were characteristics of teachers. Indications were that as a principal's period of service in a school increased, his influence on openness of climate also increased. Somewhat disconcertingly, Hindrance and Production Emphasis were shown to be positively related to principals' years of training, suggesting that the highly trained principal tends to be somewhat authoritarian--perhaps until his strong goal orientation is tempered by a period of experience in a school during which he develops sensitivity to personal need-dispositions of staff.

On the basis of teacher perception, it would appear that presence on staff of some male teachers and some older and more experienced teachers might result in lower Disengagement and higher Esprit, and hence a somewhat more open climate in the school.

Tests of relationships between biographical characteristics and teacher behavior patterns indicated definite direct connection between each of teachers' age, experience, and years of service in the present school and behavior described as responsible, business-like and systematic vs unplanned and slipshod. These relationships were consistently maintained in tests based on school means and total teacher sample using superintendents' composite ratings of teacher behavior and in similar tests using teacher self-ratings. Teachers themselves, through their self-ratings, also indicated relationships between the other







behavior patterns and age, experience, and tenure, but these were not borne out by tests with composite ratings. It is somewhat disturbing that no definite positive relationship between training and behavior emerged. There was indication of such relationship for school mean pattern scores based on teachers' self-ratings, but the other three tests of the same relationships rather effectively negated the indication.



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## CHAPTER IX

### SUMMARY AND CONCLUSIONS

The study was designed for the purpose of exploring the relationship between school organizational climate and teacher classroom behavior. It was hoped that by so doing some suggestions might be made to practising administrators who have the continuing responsibility of choosing teachers and principals and placing them such that they work together with best possible advantage to the children they serve and the greatest possible personal satisfaction to themselves. Though it was recognized that this study would provide few, if any, final answers regarding the underlying problem of teacher effectiveness, it was the hope that its focusing of attention on the "middle step" between antecedent conditions to teaching and the pupil growth consequent from it would suggest to other research workers studies which would result in findings directly applicable to the problems of both practising administrators and training institutions. In this final chapter the report of the investigation is summarized and implications for both administrators and research workers are set forth.

#### I. SUMMARY OF THE STUDY

Two types of problems have absorbed the attentions of administrators and researchers over the years. The first is the problem of teacher effectiveness. Most studies in this field have sought to relate teacher properties to some measure of pupil growth, but growing numbers of writers agree that in order to understand the effects of



teaching and the teacher on pupil growth, one must examine teacher behavior in the classroom. The second problem of first line importance is the effect on the individual's performance in the institutionalized situation of interaction with others who have related responsibilities in the hierarchical social structure of the institution.

This study resulted from concern with the relationships between these two important problem areas. Although it was recognized that many factors contribute to the behavior of the teacher in the classroom, it was felt that an important one is the influence resulting from his interaction with the principal and fellow staff members. Organizational climate was the concept chosen to encompass the sum of these interactional influences. Since organizational climate results from the interaction of the individuals who make up the faculty group, a reverse influence was also suggested. As a prominent member of his classroom group, the teacher has much to do with the establishment of its climate, and consequently may well use his degree of "success" there as a part of the frame of reference governing his relationships with his faculty colleagues.

The Getzels-Thelen model provides a useful conceptualization for presenting the basic postulate that through group interaction a climate of consensus develops in any social system as interaction assists each member to establish a level of congruence between institutional role expectations and personal need-dispositions.(3). But the teacher is a member of both faculty social system and classroom social system within the school. It was hypothesized that, as a result of this situation, experience in each social system tends to provide







part of the teacher's frame of reference for attitudes and behavior in the other. In terms of the Getzels-Thelen model, it was suggested that the nomothetic or sociological dimension of the faculty group's interaction, which would be strongly influenced by the principal, is the probable source of most organizational climate influence on teacher classroom behavior. On the other hand, the ideographic or psychological dimension, affected by the teacher's satisfaction with his classroom performance is the probable source of most of the influence exerted by the classroom social system on the teacher's perceptions of the faculty situation.

Studies were quoted which supported the contention that multi-group membership may result in a carry-over of influence from one group to another, thus affecting attitudes and behavior (5, 2).

On the basis of the foregoing theoretical argument it was hypothesized: (1) that there is concomitancy of variation between school organizational climate and teacher classroom behavior, (2) that dimensions of organizational climate are related to patterns of classroom behavior, and (3) that teachers' perceptions of dimensions of organizational climate are related to their patterns of classroom behavior.

Ryans' COR was chosen as the instrument for gathering data on teacher classroom behavior (6). Two school superintendents, the "home" superintendent and one other, rated each teacher and from these ratings three behavior pattern scores were derived for each teacher. The behavior patterns are described as:

TCS Pattern Xo: Understanding, friendly vs. aloof, egocentric, restricted teacher behavior.



TCS Pattern Yo: Responsible, business-like, systematic vs. unplanned, slipshod teacher behavior.

TCS Pattern Zo: Stimulating, imaginative, surgent vs. dull, routine teacher behavior. (6, p. 77)

In addition, teachers used the COR to provide self-ratings which were used to obtain a parallel set of pattern scores.

Measures of organizational climate were obtained for each school by the administration of Halpin and Croft's OCDQ to all faculty members of the sample schools (4). The OCDQ yields eight subtest scores, which, when combined by schools, produce an eight dimension profile of the school's climate. These profiles are matched with six prototypic profiles to provide a climate category for each school representative of a degree of openness of climate on the continuum Open-Closed. The eight dimensions of organizational climate fall into two groups of four: Disengagement, Hindrance, Esprit, and Intimacy, which relate mainly to teachers' behavior and attitudes, and Aloofness, Production Emphasis, Thrust, and Consideration, which refer mainly to principal's attitudes and behavior (4).

The sample for the study consisted of forty schools drawn from a population of Saskatchewan elementary schools situated in small cities, towns, and large villages. Complete data were collected for 374 teachers.

Certain biographical data on principals and teachers were gathered. The staffs were considered to be relatively stable in the sense that period of service in the present school was substantial on the average. It was shown by tests of significance of difference of means between upper and lower halves of the sample divided on the







basis of each of the principal study variable that effects of biographical characteristics differences would not obscure the hypothesized relationships. However, it was decided that the relationships between biographical variables and the individual study variables was of sufficient concern to administrators to warrant a somewhat more detailed examination and reporting of them.

In choosing the Ryans COR as a teacher behavior rating instrument and involving forty-seven superintendents in the rating procedure, it was recognized that risk of unreliability of ratings existed. Two measures of reliability were made. Each superintendent was required to do a test-retest of the same teacher in a pre-study practice period, and from these a coefficient of stability of rating was obtained. In addition a reliability coefficient was found for each pair of raters for each school by correlating their pattern scores. Though the general level of rating was comparable to that reported in the Ryans' study (6), results for sixteen of the forty schools were sufficiently inferior to those for the others that it was decided to test all hypotheses on the basis of the twenty-four school subsample as well as for the full sample.

Teachers' self-ratings of classroom behavior showed little correspondence with composite or individual superintendent ratings. They were considered to have little objective value, but tests were repeated with pattern scores based on teacher self-ratings as a means of obtaining a comparative picture of teachers' perceptions.

Analysis of the OCDQ results indicated a substantial degree of correspondence with Halpin and Croft's results for the base sample (6).



Differences in raw score means of school dimension scores appeared to indicate somewhat lower principal influence for the present sample, possibly due to the relative stability of the staffs and the one room rural school experience many had had in their first years of teaching.

Three tests were employed to test the general hypothesis of concomitancy of variation between openness of climate and school means of patterns of teacher classroom behavior. No significant relationships were revealed. However, the substantial increase in the climate-Pattern Yo relationship from the full sample to the subsample strongly suggested that more accurate ratings of classroom behavior would have resulted in the appearance of significant figures for the relationship between openness of climate and teacher behavior described as responsible, business-like, systematic vs. unplanned, slipshod.

Tests of Hypothesis Two were designed to reveal relationships between school mean teacher behavior patterns and dimensions of organizational climate. An intercorrelation program produced only one significant relationship, that between Disengagement and TCS Pattern Yo, and it was significant only for the twenty-four school subsample. It did, however, tend to confirm a goal-orientation carry-over from faculty to classroom, as suggested by theory.

A multiple regression program designed to show OCDQ dimension scores as predictors of TCS Pattern scores added little to the results of Test One. In no case was a combination of dimension scores found to be a better predictor than the highest single correlation of Test One. The greatest percentage of total variance accounted for by climate dimensions was with Pattern Yo, a finding in keeping with the







results of other tests of Hypotheses One and Two. The best predictors were Disengagement, Intimacy, Hindrance, and Production Emphasis. This might be construed as supporting the tendency noted above toward slightly low principal influence in the sample schools.

Tests of the third research hypothesis were designed to reveal relationships between teachers' perceptions of climate dimensions and their TCS Pattern scores. A significant negative correlation between Pattern Yo and Aloofness suggests that responsible, systematic teachers see the principal's relations with staff as less formal than do those teachers described as unplanned and slipshod. A significant positive correlation between Pattern Zo and Hindrance suggests that the more imaginative and creative a teacher is, the more he resents any imposition of routine duties by the principal. Both significant relationships highlight negative aspects of principal behavior, thus tending to support the suggestion above that principal activity is not a matter of first concern among the teachers of the sample.

Tests of Hypothesis Two with TCS pattern scores derived from teacher self-ratings revealed relatively high positive correlations between all patterns and Hindrance, that for Yo-Hindrance in the subsample being significant, and consistent positive relationships between all patterns and Esprit, Thrust, and Consideration. All of these relationships except the ones with Hindrance appeared again in tests of Hypothesis Three using teachers' self-ratings. Generally speaking, it would appear that teachers who consider themselves to be "successful" are reasonably happy with faculty social and working relationships (moderately high correlations with Esprit), but do not want principal



interference in their classroom procedures (moderately high correlations with Hindrance), though they are willing to admit that their principals are fairly hard working, kindly disposed individuals (moderately high correlations with Thrust and Consideration). If some allowance is made for the normal subjective bias, such findings may be considered reasonably consistent with those reported above.

The short supplementary investigation of relationships between faculty biographical variables and the main study variables produced some interesting findings. As might be expected, biographical characteristics of principals were found to be much more directly related to climate and dimensions of climate than were those of teachers. Climate itself, Esprit, Thrust, Consideration, and Production Emphasis were significantly positively related and Hindrance significantly negatively related to the principal's period of service in the present school in at least one of the four tests used, producing rather strong evidence that whatever influence the principal has on openness of organizational climate in his school, this increases as his stay in the school lengthens. One slightly disturbing finding appeared: teachers perceived Hindrance and Production Emphasis to be significantly positively related to the principal's years of training, a finding which might be construed as indicating that the better trained principals tended to be somewhat more directive and autocratic in their administrative procedures than others.

Significant positive relationships between Esprit and teachers' sex, age, and experience coupled with significant negative correlations between Disengagement and the same teacher characteristics, suggest







that the presence on staff of some male teachers and some older and more experienced teachers contributes to openness of climate.

On the basis of superintendents' composite ratings, TCS Pattern Yo scores related significantly in a positive direction with age, experience, and period of service in the present school on the basis of school averages, and with all five teacher characteristics across the total teacher sample. It is noteworthy that the lowest of the five correlations was that with training. It appears from these findings that teachers might be expected to become more reliable and business-like as they grow older, become more experienced, stay longer in the present school, and acquire more training, but that their understanding and friendliness in the classroom and their stimulative, imaginative propensities are not as likely to be similarly affected. There is some indication in the findings that male teachers in the sample tended to be more systematic and reliable than the female teachers.

On the basis of teacher self-ratings many of the same relationships appeared, but teachers themselves seemed to indicate that age, experience, and tenure in the school were related to all three patterns of teacher behavior. Finally, findings indicate that in their self-descriptions of behavior teachers do not recognize strong influence from training, a finding in keeping with results based on superintendents' composite ratings.

## II. CONCLUSIONS AND IMPLICATIONS

This chapter ends with a list of conclusions derived from the study and statements of implications for further research and for



school administration.

### Conclusions

1. Though the study failed to reveal significant relationship between openness of organizational climate and patterns of teacher classroom behavior, the increase in the relationship from the full sample to the subsample suggests that openness of organizational climate may be positively related to that teacher behavior which is described as responsible, business-like, systematic vs. unplanned, slipshod. The indication was that more accurate teacher rating would have produced significant relationship.

2. The dimension of organizational climate, Disengagement, which refers to the teachers' tendency to be not genuinely concerned with the task at hand, appears to be negatively related to classroom behavior of teachers described as responsible, business-like, systematic vs. unplanned, slipshod. Of the dimensions of organizational climate the best predictors of patterns of teacher behavior seem to be Disengagement, Hindrance, Intimacy, and Production Emphasis. More of the variance of that pattern of teacher behavior described as responsible, business-like, systematic vs. unplanned, slipshod than of any other pattern of teacher behavior appears to be attributable to dimensions of organizational climate.

3. Teachers whose behavior is rated as more responsible, business-like and systematic appear to perceive their principal's Aloofness--his tendency to be formal and universalistic in his relations with staff--as being lower than do teachers whose behavior is rated as more unplanned and slipshod.







4. Teachers whose behavior is rated as more stimulating, imaginative, and surgent appear to perceive their principal's Hindrance--his tendency to impose routine and inconsequential duties-- as being higher than do teachers whose behavior is rated as being more dull and routine.

5. There is some indication in the findings of the study that principal influence in the sample schools is a slightly less important factor in establishing organizational climate than the design of the OCDQ assumes it to be.

6. Though superintendent raters using the Ryans COR appear to have used the instrument reasonably effectively, the general reliability of the results was not of a high order. Indications are that this type of observation and rating of teacher classroom behavior does not produce teacher behavior scores of sufficient reliability and validity to suggest its general adoption either for research or for field use by superintendents.

7. There was little indication that teacher self-ratings of their classroom behavior were reliable and valid.

8. Two types of evidence, the one positive, the other negative, appear to support the validity of the OCDQ and its applicability to the Saskatchewan sample. On the positive side, the distribution of the climate categories for the Saskatchewan sample did not differ significantly from that for the Halpin and Croft base sample. On the other hand, failure to show high correlation between teachers' behavior scores and their perceptions of climate dimensions makes it impossible to criticize the validity of the OCDQ from this point of view.



9. Indications are that the effects of the principal's influence on the openness of organizational climate increase with the period of his service in the school. The dimensions Esprit, Thrust, Consideration, and Production Emphasis may be expected to be rated higher and Hindrance lower as the principal's tenure becomes longer. His age and experience may also be expected to contribute on the basis of demonstrated negative relationships with Hindrance. On the other hand principal's training appears to be a negative, or at best a doubtful, contributor to his ability to influence climate, since it correlated positively with Hindrance and Production Emphasis.

10. It appears that presence on staff of some older, more experienced teachers and of some male teachers contributes to openness of climate, since sex, age, and experience were seen to be positively correlated with Esprit and negatively correlated with Disengagement, both at the level of significance.

11. Male teachers, and teachers who are older, more experienced, better trained, and have been longer in the present school may be expected to be rated higher on behavior described as responsible, business-like, systematic vs. unplanned, slipshod, on the basis of the findings. The lowest of the significant relationships was with training. These teacher characteristics do not appear to be highly related to behavior described as understanding, friendly vs. aloof, egocentric, restricted, or as stimulating, imaginative, surgent vs. dull, routine.

#### Implications for Research

The most obvious need pointed up by this study is a need for replication using a more accurate measure of teacher classroom







behavior. The present study has given some indication of important relationships between aspects of teacher behavior and elements of the social context in which the work of the classroom must proceed, but largely, it is believed, because of the inadequacy of the measure of classroom behavior few of these relationships have been positively established. It would appear that the rating scale approach to obtaining measures of classroom behavior must be abandoned in favor of some more sophisticated procedure, preferably based on some fairly extensive electronic recording of classroom interaction. The study would also be strengthened by extending it through the introduction of a measure of pupil growth. Ideally this too should be a means of extensive sampling of behavior, but a more traditional measure of productivity would serve. With such a measure the mediational effect of classroom behavior could be established against antecedent-consequent criteria.

This study has been based on the general premise that there is a two-way "carry-over" of influence in the behavioral frame of reference of an individual who is a member of two related social systems--that membership in each affects to some extent perception or behavior in the other. The two social systems, both vital to educational administration, considered in this study were the classroom group and the school faculty. But there are other social systems influencing the basic teaching-learning function of the school. Biddle includes the total school-community environment in his conceptualization of the contextual variables affecting teaching-learning effectiveness (1). The Getzels-Thelen model provides the basic theory for consideration of relationships between human behavior and other social systems besides the ones



considered in the present study (3). Such social systems as the total school group of faculty and students or the parent-teacher association might well be investigated in terms of their influence on teachers' classroom behavior.

The interesting results obtained in the small substudy of biographical characteristics as related to the main study variables suggests the value of more extensive studies of both sets of relationships--that involving organizational climate and that involving teacher classroom behavior.

The importance of a principal's period of service in a school suggests the value of longitudinal studies involving the relationships of various aspects of organizational climate and teacher behavior. These might well involve attitude studies to establish the development over time of such relationships as the growth of congruence of principal and staff member's institutional role expectations.

#### Implications for Educational Administration

Both the restrictions of population and sample and the limited positive findings of this exploratory study tend to impose caution in the stating of implications for administration. However, some indication is given by the study that relationship exists between organizational climate and that type of teacher behavior described as responsible, business-like, systematic vs. unplanned, slipshod. Since the first pressure on administrators is for the school's achievement of basic academic goals, this would appear to be a pattern of teacher behavior that they must consider important. Hence the administrator will be concerned with developing and maintaining openness of climate



considered in the present study (1971). Such a study requires an initial group of subjects and estimates of the group-level parameters. After this, the model is estimated in order to obtain estimates of individual parameters.

Statistical inference.

The theoretical results obtained in the last section are as follows:

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in his school or schools.

The study provides a basis for limited concrete suggestions toward this end. It suggests that as a principal's period of service in a school increases so does his ability to influence climate toward openness. It would appear that effort might well be made to persuade principals whose relations with staff are favorable to remain in their present schools.

An indication is also given that the presence on staff of some older, more experienced teachers and some male teachers would help to insure openness of climate.

The study gives limited evidence of the existence of a circular relationship between teacher behavior and climate, since there was a negative relationship between responsible, systematic teacher behavior and principal's Aloofness. There was also evidence that male teachers, older teachers, and more experienced teachers tend to be rated higher on this type of classroom behavior. It follows that the placement or maintenance of such teachers in a school not only might provide more systematic teaching, but would also help to create a climate which would in turn stimulate more systematic, responsible teacher behavior.

The final implication is less optimistic. There are indications from the study that ratings of teacher behavior corresponded less with teachers' years of training than with any other characteristic tested. Similarly principals' training appeared to contribute least to their ability to influence openness of climate. The latter indications were based on the perceptions of teachers. Whether or not these perceptions represent reality, it appears that administrators, teacher educators,

is the extent of the effect.

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With this end, it is necessary to find a measure of the effect of the treatment.

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and teachers themselves must be concerned with these negative indications of the efficacy of teacher education and training in administration as they are now practised.





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Teacher's Name: \_\_\_\_\_  
 Classroom: \_\_\_\_\_  
 Date: \_\_\_\_\_

Observer's Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Time: \_\_\_\_\_

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Teacher's 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Teacher's Name \_\_\_\_\_

(Please tear off here after the two COR forms have been matched and the teacher's identification number affixed.)

CLASSROOM OBSERVATION RECORD - Teacher Characteristics Study

Teacher's Identi-

fication No. \_\_\_\_\_ School \_\_\_\_\_ Date \_\_\_\_\_ Observer \_\_\_\_\_

PUPIL BEHAVIOR

REMARKS

- |                |   |   |   |   |   |   |   |   |             |
|----------------|---|---|---|---|---|---|---|---|-------------|
| 1. Apathetic   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Alert       |
| 2. Obstructive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Responsible |
| 3. Uncertain   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Confident   |
| 4. Dependent   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Initiating  |

TEACHER BEHAVIOR

- |                  |   |   |   |   |   |   |   |   |               |
|------------------|---|---|---|---|---|---|---|---|---------------|
| 5. Partial       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Fair          |
| 6. Autocratic    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Democratic    |
| 7. Aloof         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Responsive    |
| 8. Restricted    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Understanding |
| 9. Harsh         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Kindly        |
| 10. Dull         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Stimulating   |
| 11. Stereotyped  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Original      |
| 12. Apathetic    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Alert         |
| 13. Unimpressive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Attractive    |
| 14. Evading      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Responsible   |
| 15. Erratic      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Steady        |
| 16. Excitable    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Poised        |
| 17. Uncertain    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Confident     |
| 18. Disorganized | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Systematic    |
| 19. Inflexible   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Adaptable     |
| 20. Pessimistic  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Optimistic    |
| 21. Immature     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Integrated    |
| 22. Narrow       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | N | Broad         |

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## GLOSSARY

(To be used with classroom observation record)

### PUPIL BEHAVIORS

#### 1. Apathetic-Alert Pupil Behavior

##### Apathetic

1. Listless.
2. Bored-acting
3. Entered into activities half-heartedly.
4. Restless.
5. Attention wandered.
6. Slow in getting under way.

##### Alert

1. Appeared anxious to recite and participate.
2. Watched teacher attentively.
3. Worked concentratedly.
4. Seemed to respond eagerly.
5. Prompt and ready to take part in activities when they begin.

#### 2. Obstructive-Responsible Pupil Behavior

##### Obstructive

1. Rude to one another and/or to teacher.
2. Interrupting; demanding attention; disturbing.
3. Obstinate; sullen.
4. Refusal to participate.
5. Quarrelsome; irritable.
6. Engaged in name-calling and/or tattling.
7. Unprepared.

##### Responsible

1. Courteous, cooperative, friendly with each other and with teacher.
2. Completed assignments without complaining or unhappiness.
3. Controlled voices.
4. Received help and criticism attentively.
5. Asked for help when needed.
6. Orderly without specific directions from teacher.
7. Prepared.

#### 3. Uncertain-Confident Pupil Behavior

##### Uncertain

1. Seemed afraid to try; unsure.
2. Hesitant; restrained.
3. Appeared embarrassed.
4. Frequent displays of nervous habits, nail-biting, etc.
5. Appeared shy and timid.
6. Hesitant and/or stammering speech.

##### Confident

1. Seemed anxious to try new problems or activities.
2. Undisturbed by mistakes.
3. Volunteered to recite.
4. Entered freely into activities.
5. Appeared relaxed.
6. Spoke with assurance.

#### 4. Dependent-Initiating Pupil Behavior

##### Dependent

1. Relied on teacher for explicit directions.
2. Showed little ability to work things out for selves.
3. Unable to proceed when initiative called for.
4. Appeared reluctant to take lead or to accept responsibility.

##### Initiating

1. Volunteered ideas and suggestions.
2. Showed resourcefulness.
3. Took lead willingly.
4. Assumed responsibilities without evasion.





## TEACHER BEHAVIORS

## GLOSSARY . . 2

## 5. Partial-Fair Teacher Behavior

## Partial

## Fair

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Repeatedly slighted a pupil.</li> <li>2. Corrected or criticized certain pupils repeatedly.</li> <li>3. Repeatedly gave a pupil special advantages.</li> <li>4. Gave most attention to one or a few pupils.</li> <li>5. Showed prejudice (favourable or unfavourable) toward some social, racial, or religious group.</li> <li>6. Expressed suspicion of motives of a pupil.</li> </ol> | <ol style="list-style-type: none"> <li>1. Treated all pupils approximately evenly.</li> <li>2. In case of controversy, pupil allowed to explain his side.</li> <li>3. Distributed attention to many pupils.</li> <li>4. Rotated leadership impartially.</li> <li>5. Based criticism or praise on evidence.</li> </ol> |
|---|---|

## 6. Autocratic-Democratic Teacher Behavior

## Autocratic

## Democratic

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Told pupils each step to take.</li> <li>2. Intolerant of pupils' ideas.</li> <li>3. Mandatory in giving directions; orders to be obeyed at once.</li> <li>4. Interrupted pupils although their discussion was relevant.</li> <li>5. Always directed rather than participated.</li> </ol> | <ol style="list-style-type: none"> <li>1. Guided pupils without being mandatory.</li> <li>2. Exchanged ideas with pupils.</li> <li>3. Encouraged (asked for) pupil opinion.</li> <li>4. Encouraged pupils to make own decisions.</li> <li>5. Entered into activities without domination.</li> </ol> |
|--|---|

## 7. Aloof-Responsive Teacher Behavior

## Aloof

## Responsive

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Stiff and formal in relations with pupils.</li> <li>2. Apart; removed from class activity.</li> <li>3. Condescending to pupils.</li> <li>4. Routine and subject matter only concern; pupils as persons ignored.</li> <li>5. Referred to pupil as "this child" or "that child".</li> </ol> | <ol style="list-style-type: none"> <li>1. Approachable to all pupils.</li> <li>2. Participated in class activity.</li> <li>3. Responded to reasonable requests and/or questions.</li> <li>4. Spoke to pupils as equals.</li> <li>5. Commended effort.</li> <li>6. Gave encouragement.</li> <li>7. Recognized individual differences.</li> </ol> |
|---|---|

## 8. Restricted-Understanding Teacher Behavior

## Restricted

## Understanding

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Recognized only academic accomplishments of pupils; no concern for personal problems.</li> <li>2. Completely unsympathetic with a pupil's failure at a task.</li> <li>3. Called attention only to very good or very poor work.</li> <li>4. Was impatient with a pupil.</li> </ol> | <ol style="list-style-type: none"> <li>1. Showed awareness of a pupil's personal problems and needs.</li> <li>2. Was tolerant of error on part of pupil.</li> <li>3. Patient with a pupil beyond ordinary limits of patience.</li> <li>4. Showed what appeared to be sincere sympathy for a pupil's viewpoint.</li> </ol> |
|---|---|





## GLOSSARY . . 3

## 9. Harsh-Kindly Teacher Behavior

## Harsh

1. Hypercritical; fault-finding.
2. Cross, curt.
3. Depreciated pupils' efforts; was sarcastic.
4. Scolded a great deal.
5. Lost temper.
6. Used threats.
7. Permitted pupils to laugh at mistakes of others.

## Kindly

1. Went out of way to be pleasant and/or to help pupils; friendly.
2. Gave a pupil a deserved compliment.
3. Found good things in pupils to call attention to.
4. Seemed to show sincere concern for a pupil's personal problem.
5. Showed affection without being demonstrative.
6. Disengaged self from a pupil without bluntness.

## 10. Dull-Stimulating Teacher Behavior

## Dull

1. Uninteresting, monotonous explanations.
2. Assignments provided little or no motivation.
3. Failed to provide challenge.
4. Lacked animation.
5. Failed to capitalize on pupil interests.
6. Pedantic; boring.
7. Lacked enthusiasm; bored acting.

## Stimulating

1. Highly interesting presentations; got and held attention without being flashy.
2. Clever and witty, though not smart alecky or wisecracking.
3. Enthusiastic; animated.
4. Assignments challenging.
5. Took advantage of pupil interests.
6. Brought lesson successfully to a climax.
7. Seemed to provoke thinking.

## 11. Stereotyped-Original Teacher Behavior

## Stereotyped

1. Used routine procedures without variation.
2. Would not depart from procedure to take advantage of a relevant question or situation.
3. Presentation seemed unimaginative.
4. Not resourceful in answering questions or providing explanations.

## Original

1. Used what seemed to be original and relatively unique devices to aid instruction.
2. Tried new materials or methods.
3. Seemed imaginative and able to develop presentation around a question or situation.
4. Resourceful in answering questions; had many pertinent illustrations available.

## 12. Apathetic-Alert Teacher Behavior

## Apathetic

1. Seemed listless; languid; lacked enthusiasm.
2. Seemed bored by pupils.
3. Passive in response to pupils.
4. Seemed preoccupied.
5. Attention seemed to wander.
6. Sat in chair most of time; took no active part in class activities.

## Alert

1. Appeared buoyant; wide awake; enthusiastic about the activity of the moment.
2. Kept constructively busy.
3. Gave attention to, and seemed interested in what was going on in class.
4. Prompt to "pick up" class when pupils showed attention was lagging.





## GLOSSARY . . 4

## 13. Unimpressive-Attractive Teacher Behavior

## Unimpressive

## Attractive

- |   |  |
|---|--|
| 1. Untidy or sloppily dressed.  | 1. Clean and neat.   |
| 2. Inappropriately dressed.   | 2. Well-groomed; dress showed good taste.  |
| 3. Drab, colorless.   | 3. Posture and bearing attractive.   |
| 4. Posture and bearing unattractive.  | 4. Free from distracting personal habits.  |
| 5. Possessed distracting personal habits.   | 5. Plainly audible speech; good expression; agreeable voice tone; good inflection. |
| 6. Mumbled; inaudible speech; limited expression; disagreeable voice tone; poor inflection. |  |

## 14. Evading-Responsible Teacher Behavior

## Evading

## Responsible

- |   |  |
|---|--|
| 1. Avoided responsibility; disinclined to make decisions. | 1. Assumed responsibility; made decisions as required. |
| 2. "Passed the buck" to class, to other teachers, etc.    | 2. Conscientious.                                      |
| 3. Left learning to pupil, failing to give adequate help. | 3. Punctual.   |
| 4. Let a difficult situation get out of control.          | 4. Painstaking; careful.                               |
| 5. Assignments and directions indefinite.                 | 5. Suggested aids to learning.                         |
| 6. No insistence on either individual or group standards. | 6. Controlled difficult situation.                     |
| 7. Inattentive to class.                                  | 7. Gave definite directions.                           |
| 8. Cursory.   | 8. Called attention to standards of quality.           |
|   | 9. Attentive to class.                                 |
|   | 10. Thorough.  |

## 15. Erratic-Steady Teacher Behavior

## Erratic

## Steady

- |   |  |
|---|--|
| 1. Impulsive; uncontrolled; temperamental; unsteady.              | 1. Calm; controlled.                     |
| 2. Course of action easily swayed by circumstances of the moment. | 2. Maintained progress toward objective. |
| 3. Inconsistent.  | 3. Stable, consistent, predictable.      |

## 16. Excitable-Poised Teacher Behavior

## Excitable

## Poised

- |  |   |
|--|---|
| 1. Easily disturbed and upset; flustered by classroom situation.             | 1. Seemed at ease at all times.   |
| 2. Hurried in class activities; spoke rapidly using many words and gestures. | 2. Unruffled by situation that developed in classroom; dignified without being stiff or formal. |
| 3. Was "jumpy", nervous.   | 3. Unhurried in class activities; spoke quietly and slowly.                                     |
|  | 4. Successfully diverted attention from a stress situation in classroom.                        |





## GLOSSARY . . 5

## 17. Uncertain-Confident Teacher Behavior

## Uncertain

## Confident

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Seemed unsure of self; faltering, hesitant.</li> <li>2. Appeared timid and shy.</li> <li>3. Appeared artificial.</li> <li>4. Disturbed and embarrassed by mistakes and/or criticism.</li> </ol> | <ol style="list-style-type: none"> <li>1. Seemed sure of self; self-confident in relations with pupils.</li> <li>2. Undisturbed and unembarrassed by mistakes and/or criticism.</li> </ol> |
|---|--|

## 18. Disorganized-Systematic Teacher Behavior

## Disorganized

## Systematic

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. No plan for class work.</li> <li>2. Unprepared.</li> <li>3. Objectives not apparent; undecided as to next step.</li> <li>4. Wasted time.</li> <li>5. Explanations not to the point.</li> <li>6. Easily distracted from matter at hand.</li> </ol> | <ol style="list-style-type: none"> <li>1. Evidence of a planned though flexible procedure.</li> <li>2. Well prepared.</li> <li>3. Careful in planning with pupils.</li> <li>4. Systematic about procedure of class.</li> <li>5. Had anticipated needs.</li> <li>6. Provided reasonable explanations.</li> <li>7. Held discussions together; objectives apparent.</li> </ol> |
|---|---|

## 19. Inflexible-Adaptable Teacher Behavior

## Inflexible

## Adaptable

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Rigid in conforming to routine.</li> <li>2. Made no attempt to adapt materials to individual pupils.</li> <li>3. Appeared incapable of modifying explanations or activities to meet particular classroom situation.</li> <li>4. Impatient with interruptions and digressions.</li> </ol> | <ol style="list-style-type: none"> <li>1. Flexible in adapting explanations.</li> <li>2. Individualized materials for pupils as required; adapted activities to pupils.</li> <li>3. Took advantage of pupils' questions to further clarify ideas.</li> <li>4. Met an unusual classroom situation competently.</li> </ol> |
|--|--|

## 20. Pessimistic-Optimistic Teacher Behavior

## Pessimistic

## Optimistic

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Depressed; unhappy.</li> <li>2. Skeptical.</li> <li>3. Called attention to potential "bad".</li> <li>4. Expressed hopelessness of "education today", the school system or fellow educators.</li> <li>5. Noted mistakes; ignored good points.</li> <li>6. Frowned a great deal; had unpleasant facial expression.</li> </ol> | <ol style="list-style-type: none"> <li>1. Cheerful; good-natured.</li> <li>2. Genial.</li> <li>3. Joked with pupils on occasion.</li> <li>4. Emphasized potential "good".</li> <li>5. Looked on bright side; spoke optimistically of the future.</li> <li>6. Called attention to good points; emphasized the positive.</li> </ol> |
|---|---|



## GLOSSARY . . 6

## 21. Immature-Integrated Teacher Behavior

## Immature

## Integrated

1. Appeared naive in approach to classroom situations.
2. Self-pitying; complaining; demanding.
3. Boastful; conceited.

1. Maintained class as centre of activity; kept self out of spotlight; referred to class activities, not own.
2. Emotionally well controlled.

## 22. Narrow-Broad Teacher Behavior

## Narrow

## Broad

1. Presentation strongly suggested limited background in subject or material; lack of scholarship.
2. Did not depart from text.
3. Failed to enrich discussion with illustrations from related areas.
4. Showed little evidence of breadth of cultural background in such areas as science, arts, literature, history.
5. Answers to pupils' questions incomplete or inaccurate.
6. Noncritical approach to subject.

1. Presentation suggested good background in subject; good scholarship suggested.
2. Drew examples and explanations from various sources and related fields.
3. Showed evidence of broad cultural background in science, art, literature, history, etc.
4. Gave satisfying, complete, and accurate answers to questions.
5. Was constructively critical in approach to subject matter.

NOTE: Observer is asked to make notes during observation and to attempt to relate observed behaviors to those listed in the Glossary. Immediately following the observation, listed comments should be summarized and an estimate made of the extent to which one or the other pole of each of the 22 dimensions was approximated by the teacher or pupil behavior observed. "N" is used only when no estimate of the dimension is possible. Avoid the "central tendency" (tendency to give all dimensions the neutral 4 rating) and the "halo effect" (tendency to let a few definite ratings influence others).







## APPENDIX B

APPENDIX B

APPENDIX B

The purpose of this questionnaire is to collect information about the organizational climate of your organization. The questionnaire is designed to collect information about the organizational climate of your organization. The questionnaire is designed to collect information about the organizational climate of your organization. The questionnaire is designed to collect information about the organizational climate of your organization.

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### APPENDIX B

## THE ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

1. What is the name of your organization?

2. What is the name of the department or unit you work in?

3. What is the name of the person who is your direct supervisor?

4. What is the name of the person who is your indirect supervisor?

5. What is the name of the person who is your peer?

6. What is the name of the person who is your customer?

7. What is the name of the person who is your manager?



## ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

Name of School \_\_\_\_\_

Your Identification Number \_\_\_\_\_

The items in this questionnaire describe typical behaviors or conditions that occur within an elementary school organization. Please indicate to what extent each of these descriptions characterizes your school. Please do not evaluate the items in terms of "good" or "bad" behavior, but read each item carefully and respond in terms of how well the statement describes your school.

The purpose of this questionnaire is to secure a description of the different ways in which teachers behave and of the various conditions under which they must work. After you have answered the questions examination will be made of the behaviors or conditions that have been described as typical by the majority of the teachers in your school, and from this description, a portrait of the Organizational Climate of your school will be constructed.

Please:

- a. READ each item carefully;
- b. THINK about how frequently this applies in your school;
- c. DECIDE whether it Rarely occurs, Sometimes occurs, Often occurs, or Very frequently occurs;
- d. CHECK the appropriate square beside each item;
- e. BE SURE that you have marked every item;
- f. COMPLETE the biographical information page. (Biographical information will be used only for group comparisons.)

---

Adapted from The Organizational Climate of Schools, a study conducted by Andrew W. Halpin and Don B. Croft pursuant to Contract Number SAE 543(8639) with the United States Office of Education, Department of Health, Education, and Welfare, 1962.





## ORGANIZATIONAL CLIMATE DESCRIPTION QUESTIONNAIRE

	RARELY OCCURS	SOMETIMES OCCURS	OFTEN OCCURS	VERY FREQUENTLY OCCURS
1. Teachers' closest friends are other faculty members at this school.				
2. The mannerisms of teachers at this school are annoying.				
3. Teachers spend time after school with students who have individual problems.				
4. Instructions for the operation of teaching aids are available.				
5. Teachers invite other faculty members to visit them at home.				
6. There is a minority group of teachers who always oppose the majority.				
7. Extra books are available for classroom use.				
8. Sufficient time is given to prepare administrative reports.				
9. Teachers know the family background of other faculty members.				
10. Teachers exert group pressure on non-conforming faculty members.				
11. In faculty meetings, there is the feeling of "let's get things done".				
12. Administrative paper work is burdensome at this school.				
13. Teachers talk about their personal life to other faculty members.				
14. Teachers seek special favors from the principal.				



- 2 -

	RARELY OCCURS	SOMETIMES OCCURS	OFTEN OCCURS	VERY FREQUENTLY OCCURS
15. School supplies are readily available for use in classwork.				
16. Student progress reports require too much work.				
17. Teachers have fun socializing together during school time.				
18. Teachers interrupt other faculty members who are talking in staff meeting.				
19. Most of the teachers here accept the faults of their colleagues.				
20. Teachers have too many committee requirements.				
21. There is considerable laughter when teachers gather informally.				
22. Teachers ask nonsensical questions in faculty meetings.				
23. Custodial service is available when needed.				
24. Routine duties interfere with the job of teaching.				
25. Teachers prepare administrative reports by themselves.				
26. Teachers ramble when they talk in faculty meetings.				
27. Teachers at this school show much school spirit.				
28. The principal goes out of his way to help teachers.				





- 3 -

	RARELY OCCURS	SOMETIMES OCCURS	OFTEN OCCURS	VERY FREQUENTLY OCCURS
29. The principal helps teachers solve personal problems.				
30. Teachers at this school stay by themselves.				
31. The teachers accomplish their work with great vim, vigor, and pleasure.				
32. The principal sets an example by working hard himself.				
33. The principal does personal favors for teachers.				
34. Teachers eat lunch by themselves in their own classrooms.				
35. The morale of the teachers is high.				
36. The principal uses constructive criticism.				
37. The principal stays after school to help teachers finish their work.				
38. Teachers socialize together in small select groups.				
39. The principal makes all class-scheduling decisions.				
40. Teachers are contacted by the principal each day.				
41. The principal is well prepared when he speaks at school functions.				
42. The principal helps staff members settle minor differences.				



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	RARELY OCCURS	SOMETIMES OCCURS	OFTEN OCCURS	VERY FREQUENTLY OCCURS
43. The principal schedules the work for the teachers.				
44. Teachers leave the grounds during the school day.				
45. The principal criticizes a specific act rather than a staff member.				
46. Teachers help select which courses will be taught.				
47. The principal corrects teachers' mistakes.				
48. The principal talks a great deal.				
49. The principal explains his reasons for criticism to teachers.				
50. The principal tries to get better salaries for teachers.				
51. Extra duty for teachers is posted conspicuously.				
52. The rules set by the principal are never questioned.				
53. The principal looks out for the personal welfare of teachers.				
54. School secretarial service is available for teachers' use.				
55. The principal runs the faculty meeting like a business conference.				
56. The principal is in the building before teachers arrive.				





- 5 -

	RARELY OCCURS	SOMETIMES OCCURS	OFTEN OCCURS	VERY FREQUENTLY OCCURS
57. Teachers work together preparing administrative reports.				
58. Faculty meetings are organized according to a tight agenda.				
59. Faculty meetings are mainly principal-report meetings.				
60. The principal tells teachers of new ideas he has run across.				
61. Teachers talk about leaving the school system.				
62. The principal checks the subject-matter ability of teachers.				
63. The principal is easy to understand.				
64. Teachers are informed of the results of a supervisor's visit.				
65. Grading practices are standardized at this school.				
66. The principal insures that teachers work to their full capacity.				
67. Teachers leave the building as soon as possible at the day's end.				
68. The principal clarifies wrong ideas a teacher might have.				
69. Schedule changes are posted conspicuously at this school.				



## BIOGRAPHICAL INFORMATION SHEET

Name of School \_\_\_\_\_

Position: Principal \_\_\_\_\_ Teacher \_\_\_\_\_

Man \_\_\_\_\_ Woman \_\_\_\_\_

Age: below 29 \_\_\_\_\_

30 - 39 \_\_\_\_\_

40 - 49 \_\_\_\_\_

50 - 59 \_\_\_\_\_

60 or over \_\_\_\_\_

Years of training recognized on the salary schedule:

one \_\_\_\_\_

two \_\_\_\_\_

three \_\_\_\_\_

four \_\_\_\_\_

five \_\_\_\_\_

Years of experience in education:

0 - 9 \_\_\_\_\_

10 - 19 \_\_\_\_\_

20 - 29 \_\_\_\_\_

30 or over \_\_\_\_\_

Years at this school: 0 - 4 \_\_\_\_\_

5 - 9 \_\_\_\_\_

10 - 19 \_\_\_\_\_

20 or over \_\_\_\_\_





TABLE XLVIII  
ITEM DISTRIBUTION AND SCORING KEY<sup>a</sup> FOR OCDQ SUBTESTS

Disengage- ment	Teachers' Behavior			Principal's Behavior			
	Hindrance	Esprit	Intimacy	Alloofness	Production Emphasis	Thrust	Consider- ation
2	-4	3	1	34	39	28	29
6	-8	7	5	40	43	32	33
10	12	11	9	44	47	36	37
14	16	15	13	52	48	41	42
18	20	19	17	-54	51	49	46
22	24	21	-25	55	62	53	50
26		23	57	58	66	56	
30		27		59		60	
38		31		-64		63	
61		35					

<sup>a</sup>Items are scored 6, 7, 8, or 9 for Rarely occurs, Sometimes occurs, Often occurs, or Very frequently occurs, respectively; items preceded by the minus sign are scored 9, 8, 7, or 6.



TABLE XLIX

PROTOTYPIC PROFILES FOR SIX ORGANIZATIONAL CLIMATES RANKED  
IN RESPECT TO OPENNESS VS. CLOSEDNESS

Climates	Teachers' Characteristics				Principal's Characteristics			
	Disen- gagement	Hindrance	Esprit	Intimacy	Aloof- ness	Production Emphasis	Thrust	Consider- ation
Open	43	43	63	50	42	43	61	55
Autonomous	40	41	55	62	61	39	53	50
Controlled	38	57	54	40	55	63	51	45
Familiar	60	42	50	58	44	37	52	59
Paternal	65	46	45	46	38	55	51	55
Closed	62	53	38	54	55	54	41	44





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## APPENDIX C

### CORRESPONDENCE

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COPY

AMERICAN COUNCIL ON EDUCATION  
1785 Massachusetts Avenue  
Washington 6, D. C.

Publications Division

November 20, 1962

Mr. R. F. E. Harvey  
9631 - 79th Street  
Edmonton, Alberta  
Canada

Dear Mr. Harvey:

The American Council on Education is glad to give you permission to reproduce and duplicate the "Classroom Observation Record and Glossary" which appears in Characteristics of Teachers as indicated in your letter of November 13. It is understood that full acknowledgment will be made of the source of this material.

You may be able to obtain copies of this form by writing to Dr. David G. Ryans, Head of Educational Developments, Center for Research in System Development, System Development Corporation, 2500 Colorado Avenue, Santa Monica, California.

Sincerely yours,

(Signed) Robert Quick

Robert Quick  
Director of Publications





COPY

DEPARTMENT OF  
HEALTH, EDUCATION, AND WELFARE  
OFFICE OF EDUCATION

Washington 25, D. C.

November 23, 1962.

Mr. R. F. E. Harvey  
9631 - 79th Street  
Edmonton, Alberta

Dear Mr. Harvey:

Your recent letter to Dr. Francis A. J. Ianni has been referred to me for reply. The Office has no objection to your use of the instrument developed by Dr. A. W. Halpin in his Cooperative Research Project #543. His Organizational Climate Descriptive Questionnaire is included as an appendix in the final report which will be distributed through the Library of Congress Documents Expediting Project to the libraries shown on the enclosed list.

Yours very truly,

(Signed) Rosa D. Wiene

Rosa D. Wiener  
Research Associate  
Cooperative Research Branch

Enclosure



COPY

THE SASKATCHEWAN  
TEACHERS'  
FEDERATION

P. O. Box 1108  
902 Spadina Crescent East  
Saskatoon, Saskatchewan

January 4, 1963.

Mr. R. F. Harvey,  
9631 - 79th Street,  
Edmonton, Alberta.

Dear Mr. Harvey:

At the Executive meeting of December 8, 1962, a motion was passed that the Saskatchewan Teachers' Federation approve the use of the Saskatchewan Teachers' Federation in the research for your doctoral dissertation.

A topic such as yours which will involve a study of factors influencing the effectiveness of the school will no doubt be of interest to teachers and we feel they will give their co-operation when it is realized that the results will be used for research only.

If it would be of value to you, we would be prepared to write to individual schools soliciting their support for your thesis.

You may feel free to quote any or all of this letter.

Kind personal regards,

Sincerely yours,

(Signed) G. Eamer

G. D. Eamer,  
Secretary-Treasurer.

GDE: am





COPY

9631 - 79 St.,  
Edmonton, Alta.,  
January 16, 1963.

Dear (Principal):

May I solicit your help with a research study that I am undertaking as part of my doctoral program in the Division of Educational Administration at the University of Alberta? Would you please discuss the contents of this letter with your staff and let me know if your faculty group is willing for your school to become one of the 40 or 50 Saskatchewan public schools included in my study?

The study is exploratory and will seek to discover what, if any connections there are between staff relationships in a school and the classroom behavior of the teachers in their work with their pupils. The study will try to answer such questions as: (1) Is there any connection between such staff characteristics as the leadership behavior of the principal, the harmony, the morale, or the satisfaction of the staff, on the one hand, and the way in which the teacher operates in the classroom, on the other? (2) Does the way in which the teacher interacts with his pupils have an effect on his perceptions of his principal and others on the staff? It is believed that general answers to such questions can have a useful bearing on long-range planning for the greater effectiveness of our elementary schools.

Before going on with the operational details I want to tell you that I have discussed my plans with your superintendent of schools and with Executive members and staff members of the Saskatchewan Teachers' Federation. All approve of my plans and purposes. A rather complete description of my thesis proposal is on file at the STF office in Saskatoon, and in reply to my letter about it Mr. Eamer wrote in part:

At the Executive meeting of December 8, 1962 a motion was passed that the Saskatchewan Teachers' Federation approve the use of the Saskatchewan Teachers' Federation in the research of your doctoral dissertation.

A topic such as yours which will involve a study of factors influencing the effectiveness of the schools will no doubt be of interest to teachers and we feel that they will give their co-operation when it is realized that the results will be used for research only.

As the brief description above implies, two sorts of measurements have to be taken in the sample schools. The measure of staff relations is done very simply through each faculty member's completion of a questionnaire which can be administered to the faculty as a





. . . 2

group in about 45 minutes. The measure of teacher classroom behavior is done through the usual supervisory visit of your local school superintendent. However, one unusual feature has to be introduced here. My study requires that a second (neighboring) superintendent visit each classroom a few weeks after the home superintendent to make a further observation. His visit will be of about 45 minutes duration.

This completes the participation of yourself and your staff. You personally will be asked to complete one of the questionnaires along with the staff, but there will be no observation of your classroom work.

Please let me hasten to add these facts:

(1) Teachers' names will not reach me at all. After the superintendents have visited the classrooms they will detach teachers' names from the reporting sheets and assign identifying numbers in place of them. Only these identifying numbers will be used on the questionnaires. In short, complete personal anonymity will be preserved.

(2) The questionnaires will be administered by the local superintendent only after all observational visits are complete. Questionnaires will be gathered at the end of the administration session and immediately sealed in an envelope addressed to me. No one but me will see them and I won't know the names of the people who completed them. No staff lists will be sent to me at all.

(3) No names or other identification of schools will appear in my thesis or be otherwise divulged.

(4) All data are being gathered for research purposes only. No other use of any sort will be made of them.

It is of great importance to me that I receive permission to work in yours and the other schools I am contacting because of the rather rigorous school selection criteria I have used. I earnestly solicit your co-operation.

Please use the enclosed card which is addressed to me to indicate your reply to my request. The other card is for your use in informing your superintendent of your decision. Your superintendent knows me and is acquainted with the general nature of my study. I am sure he would be willing to discuss it with you if you wish further information.

I will be grateful for an early (and favorable) reply.

Yours sincerely,

R. F. E. Harvey.





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## OPERATIONAL DETAILS FOR THE HARVEY RESEARCH PROJECT

### I. MATERIALS ENCLOSED:

- 1 set Operational Details
- \_\_\_\_ Staff Identification Number Sheets
- \_\_\_\_ COR Rating Sheets
- 1 COR Glossary
- 1 Sheet for Reporting COR Rating Correlation Coefficient For Practice Sessions
- \_\_\_\_ OCDQ Booklets
- 1 Stamped Return Envelope

### II. MEASUREMENTS TO BE MADE:

1. Classroom behavior ratings of all staff teachers (but not the principal) in each subject school by the home superintendent. The instrument is the COR.
2. Ratings of the same teachers by the visiting superintendent.  
Note: There is to be at least a two-week interval between the first and the second ratings of any teacher.
3. Administration of the OCDQ to the whole faculty (includes the principal) of each subject school by the home superintendent.

### III. RESPONSIBILITIES THE HOME SUPERINTENDENT IS ASKED TO ASSUME:

1. Read V. DIRECTIONS FOR THE USE OF THE COR (on next page) and practise with the COR rating sheet during visits to 8 or 10 teachers other than those in the subject schools. (If this was done following our November meeting, it need not be done again.) After this practice, try a first and second rating of the same teacher with a two-week interval between visits. Calculate a correlation coefficient for the two sets of rating scores, according to the method referred to in our November meeting, and report this coefficient to me on the Reporting Sheet enclosed. This Sheet can be placed in the return envelope with the other materials from the subject schools. If you do not wish to bother with this calculation, carry through the procedure described here and send me the two practice rating sheets on the same teacher. Mark the sheets "Practice" and remove the teacher's name from them.
2. Do the classroom visits and complete the COR sheets for your subject schools.
3. Complete a Staff Identification Number Sheet (enclosed) for each school. Place each teacher's identification number on his COR rating sheet, but do not detach teachers' names at this time.





4. Notify your visiting superintendent as soon as you have completed your visits to your subject schools. Note: I will send you his name as soon as I have completed arrangements with him.

5. Your visiting superintendent will turn his completed COR sheets over to you. Please place on his sheets the same identification numbers these teachers were assigned on your own COR sheets, i.e., the numbers from the Staff Identification Number Sheet.

6. Having made sure of accurate correspondence of identification numbers, please tear all teachers' names off the completed COR sheets and place the sheets in the return envelope. Don't seal it.

7. At any time that is convenient to you and the subject school faculty, please administer the OCDQ in your subject school(s). The whole faculty (including the principal) does this in a group session. Administration directions are in Section VI. of these Operational Details.

8. It is hoped that all of this can be accomplished before Easter.

#### IV. RESPONSIBILITIES THE VISITING SUPERINTENDENT IS ASKED TO ASSUME:

1. The home superintendent will notify you when he has finished his classroom visits to his subject schools. No teacher should be visited earlier than two weeks after the home superintendent's visit to him. However, please do your COR ratings as soon as you can after this interval has elapsed.

2. Please read III., 1. above. The preliminary practice and the reporting of a correlation coefficient apply to visiting superintendents as well as the home superintendents. Directions for the use of the COR are in Section V. below.

3. When you have completed your COR ratings as a visiting superintendent, please send all of your completed COR rating sheets and your Correlation Coefficient Record (or the pair of practice sheets on the same teacher) to the home superintendent. He will place on your sheets the identification numbers he has assigned to the teachers, detach the teachers' names, and forward the sheets to me after he has done the OCDQ with his subject schools.

#### V. DIRECTIONS FOR THE USE OF THE COR:

1. The COR is a form for evaluating 4 characteristics of pupil classroom behavior (assumed to reflect teacher behavior) and 18 characteristics of teacher classroom behavior. Each is scored on a 7-place continuum between two polar evaluations which are named. The Glossary suggests behavior typical of these extremes. Study the Glossary intensively and get a good "feel" for the 22 characteristics. Glossary descriptions are not intended to be exhaustive, but merely illustrative.





2. Base each teacher evaluation on a classroom visit of at least 45 minutes.

3. Though the practice is not lauded in manuals of supervision practice, you might find it useful for this assignment to keep the COR blank before you during the classroom visit and to jot notes in the wide right hand margin as the lesson proceeds. An alternative would be to have the list of 22 characteristics of behavior in your notebook if you are using it in the classroom.

4. Complete the COR rating sheet immediately after the classroom visit while all details are fresh in your mind.

5. In marking, circle the number which in your opinion best represents the teacher's position in the rating continuum for each item. The N stands for "Not able to rate", and would be used only when no possible inference could be drawn regarding this characteristic during the observation period.

6. In marking:

- (a) avoid the "central tendency", i.e., tending to mark every characteristic at or near 4 because it is the "average" mark;
- (b) avoid "halo effect", i.e., permitting an over-all impression (particularly a previously formed one), or marks on a few definitely demonstrated characteristics, to influence your rating of all 22 items; and
- (c) be as objective and discriminating as possible -- neither too generous nor too critical.

#### VI. DIRECTIONS FOR ADMINISTERING THE OCDQ:

1. The home superintendent is asked to arrange with the school faculty for an hour (maximum) of time when they can assemble as a group to complete the OCDQ under the superintendent's supervision.

2. Be sure to take along your Staff Identification Number List when administering the OCDQ. When you hand out the booklets, be sure to inform each teacher of his proper identification number and insure that he places it on his OCDQ booklet. His name does not go on the booklet at all; the number is the only identification used. Note: the principal is to do an OCDQ too. He must be assigned the next number in rotation following those used for the staff.

3. Also take with you to the school the stamped return envelope which should now contain all completed COR's and the Correlation Coefficient Report Sheets for the visiting superintendent and yourself. As soon as the teachers have finished their OCDQ's, place them in the return envelope with the other material and close the envelope for mailing. Please use only the metal fastener and DO NOT seal. Postage on the envelope is sufficient for an unsealed package only. Note: Your Staff Identification Number Sheet is not to be sent to me.





4. When the school faculty has assembled for this session, start by reading the following statement before you hand out the OCDQ booklets:

You are probably familiar with personality tests and how a profile is constructed from test scores to describe the individual's personality. The questionnaire you are to complete today is an attempt to gain the information to permit construction of your school's "personality" profile, to be called its Organizational Climate. To be useful your answers must be entirely frank and arrived at entirely independently. You will not be placing your name on the questionnaire at all. The identification number assigned to you to place on the booklet is used only for cross-checking purposes in connection with other material, and will not be used for any personal identification.

Please be sure to answer every question even though you think some do not seem to apply in your school. This applies to the principal too, though many questions have to do with principal behavior.

Be sure to complete the biographical information sheet. Again, this information will not be used to establish individual identity or to compare persons. It will be used only to establish average characteristics of groups.

There is no time limit. You will probably finish the questionnaire in about 20 minutes, but use as much time as you wish. As soon as you are finished I shall gather your booklets, place them in the return envelope provided, and mail them at once. I will not examine them.

Please be sure to read the directions on the booklet and to answer all questions. Now I'll hand out the booklets and assign the identification numbers. Then you may start.





COPY

9631 - 79th St.  
Edmonton, Alberta

Dear (Principal):

As my research study develops, more and more intriguing possibilities appear in this most interesting field of interpersonal relations and influences. You may recall that in my original letter to you I suggested that I would investigate the possibility that a teacher's classroom behavior is related to his perception of his principal's behavior and the behavior of the others on the staff. My method of testing this is to have the superintendents make observations of teacher behavior and then to compare the record of these with the results of an "organizational climate" questionnaire. Since setting this machinery in motion, I have succumbed to the temptation to find out how the teacher's own assessment of his classroom behavior relates to his views of his school's organizational climate.

With your permission I would like to add a few minutes work (to be done in his own time) to the part that each teacher is already playing in my study. For your part, it adds the responsibility of handling some materials which I am sending you under separate cover.

Here are the steps in the new procedure:

1. Very soon I shall I shall send you a package which contains: (a) instructions for teachers in the form of a single-page letter to teachers, (b) Classroom Observation Record (COR) rating sheets, (c) COR Glossaries, (d) plain envelopes, -- one per teacher of each of these four items -- and, (e) a large stamped return envelope.
2. Please DO NOT allow teachers to see these materials until both the "home"superintendent and the "visiting" superintendent have completed their classroom visits in your school. (Allowing teachers to see the rating forms ahead of the superintendents' visits would introduce to the observation and rating situation a new element which would destroy the comparability of my rating statistics.) However, immediately after the second superintendent is finished his observations, please hand one of each of the first four items mentioned above (directions letter, COR, Glossary, and envelope) to each of your teachers and ask him or her to read them very carefully and carry out the self-rating project as it is described.. (I enclose a copy of the letter to teachers. Will you read it now please for your own information.)
3. Please remind the teachers to bring their completed COR's in their sealed envelopes to the final session which your superintendent will arrange with you for the completion of the organizational climate questionnaire. This session should take place very soon after the second superintendent completes his classroom visits, because it is my hopeto have all data collection completed by Easter.



4. At this general session for doing the questionnaire, the superintendent will be assigning identification numbers to the teachers. The individual teacher will place the same number on both his questionnaire and his COR envelope. (This same number has been placed on the COR's completed by the superintendents too, and the teachers' names have been removed from them. Thus I have a means of matching all data relevant to the individual teacher without knowing his name.) The superintendent will be gathering the questionnaires and mailing them to me right after their completion. At this time will you please look after the gathering of the teachers' envelopes? (You might just insure that the number has been written on the envelope in each case as you pick it up.) Please place them in the large return envelope which accompanies the materials and mail them to me right away. Thus all data collection will be finished off at this one session, and the superintendent can then destroy his key list of teachers' names and identification numbers.

5. I want to take this opportunity to thank you most sincerely for your fine co-operation and assistance.

Yours sincerely,

R. F. E. Harvey.







COPY

9631 - 79th St.  
Edmonton, Alberta

Dear Teacher:

With your indulgence I would like to make a small addition to my research study. This new part involves you, but no other person. When you can arrange an hour alone tonight or after school, will you please read the following very carefully and try the assignment as it is described?

1. What you have been handed is the exact rating form and Glossary which the two superintendents used when they observed in your classroom. Will you please use them to do a SELF-RATING?

2. The Classroom Observation Record (COR) lists 22 characteristics of classroom behavior -- 4 describing the pupils, and 18 describing the teacher (you!). Note that you score each characteristic by circling one of the numbers from 1 to 7 which best indicates your position (or that of your pupils in the case of the first four items) relative to the named extremes of each characteristic. (The "N" means "not able to rate", and certainly will not apply in this self-rating of yours.) The Glossary contains a number of phrases descriptive of typical behavior for each of the extremes of each of the 22 characteristics. The lists are just suggestive -- to give the rater a "feel" for the differences between high and low ratings on each characteristic. The rater scores each characteristic by carefully studying the Glossary to get this sense of the values involved in the item and then weighing the behavior of the students (for the first four) or the teacher, and judging the point on the continuum of numbers between the extremes which best indicates the degree of possession of the characteristic.

3. Now, thinking of your own classroom as it typically operates, try doing a self-rating by working through the items one by one. Keep the Glossary in front of you and make as much use of it as you wish. Please be as objective as possible under the circumstances. Don't think only of your best moments or of your worst (nor just of your best pupils or of your worst), but try to assess the usual situation in your classroom -- as it might appear, say, to an unseen observer. Try to weigh each characteristic quite separately from the others so that any strengths or weaknesses you think are present will be reflected in your scoring. Please complete your COR right away and do it without consulting with anyone else.

4. Please note these points:

- (a) You do not put your name on your COR sheet.
- (b) You seal it in the envelope when you have finished the rating -- (only the rating sheet; you may keep or destroy the Glossary.)
- (c) When you have your final staff session in connection with my study --



and this should be very soon now -- please take your sealed envelope to the meeting.

- (d) Here you will be assigned an identification number to be placed both on your COR envelope and on the questionnaire you will complete at that time.
- (e) Your principal will collect the numbered envelopes and immediately mail them to me in a large envelope which I shall supply to him.
- (f) Your superintendent will collect the questionnaires and similarly send them off to me at once.
- (g) The master list of staff identification numbers is to be destroyed at this time. It does not come to me.
- (h) Your anonymity is completely protected. No one can identify you with any of the data relative to you. You become simply a number among some 450 others.

5. Incidentally, your self-rating is not to be used to check the efficiency of the superintendents, nor is it to be used to show that teachers have a good or poor opinion of themselves. It will be used to throw a little more light on the rather complex interpersonal and inter-group relationships which exist within schools.

6. May I take this opportunity to thank you most sincerely for your patience, co-operation, and help with my research? It is much appreciated, I assure you.

Yours sincerely,

R. F. E. Harvey.











TABLE L

STABILITY AND RELIABILITY OF SUPERINTENDENTS' RATINGS OF  
TCS TEACHER CLASSROOM BEHAVIOR PATTERNS

School Ident. No.	No. of Staff Rated	Stability of Assessment Achieved by Each Superintendent Based on Two Observations of the Same Teacher Fourteen Days Apart Prior to Commencement of Rating in the Sample Schools				Reliability of Assess- ment Based on Correla- tion of Assessments of First Observer and Second Observer		
		Home	Stab.	Visiting	Stab.	Reliability Coeff. <sup>b</sup>		
		Supt.	Coeff. <sup>a</sup>	Supt.	Coeff. <sup>a</sup>	Xo	Yo	Zo
1	8	A	.80	B	.72	.53	.82	.21
2	7	C	.82	D	.86	.68	.72	.82
3	11	C	.82	D	.86	.93	.67	.79
4	5	E	.59	F	.62	.91	.33	.59
5	14	G	.70	H	.76	.79	.57	.74
6	9	I	.85	J	.86	.44	.67	.95
7	8	I	.85	J	.86	.89	.68	.94
8	12	K	.80	L	.60	.75	.67	.35
9	8	M	.40	N	.62	.24	.56	.55
10	6	O	.75	P	.83	.86	.90	.96
11	7	Q	.82	J	.86	.29	.65	.75
12	11	Q	.82	J	.86	.65	.88	.77
13	9	R	.84	S	.81	.69	.91	.83
14	13	M	.40	T	.63	.51	.69	.55
15	17	U	.76	V	.87	.32	.65	.81

(Continued.)





TABLE L (continued)

School Ident. No.	No. of Staff Rated	Stability of Assessment Achieved by Each Superintendent Based on Two Observations of the Same Teacher Fourteen Days Apart Prior to Commencement of Rating in the Sample Schools				Reliability of Assessment Based on Correlation of Assessments of First Observer and Second Observer		
		Home	Stab.	Visiting	Stab.	Reliability Coeff. <sup>b</sup>		
		Supt.	Coeff. <sup>a</sup>	Supt.	Coeff. <sup>a</sup>	Xo	Yo	Zo
16	8	W	.78	X	.85	.85	.85	.94
17	7	V	.87	Y	.82	.57	.83	.79
18	12	K	.80	U	.76	.99	.99	.98
19	5	Z	.68	AA	.65	.33	.55	.23
20	7	BB	.79	CC	.72	.95	.96	.94
21	7	H	.76	G	.70	.80	.96	.92
22	9	H	.76	G	.70	.44	.41	.75
23	12	DD	.72	EE	.88	.65	.58	.77
24	6	FF	.87	GG	.84	.76	.92	.37
25	16	Y	.82	HH	.66	.56	.52	.73
26	15	P	.83	II	.70	.83	.85	.61
27	11	GG	.84	JJ	.81	.86	.92	.76
28	7	DD	.72	EE	.88	.83	.69	.66
29	11	KK	.84	FF	.87	.61	.75	.92
30	8	A	.80	LL	.70	.80	.96	.58
31	13	KK	.84	JJ	.81	.24	.73	.34
32	5	N	.62	M	.40	.02	.91	.24

(Continued.)



TABLE L (continued)

School Ident. No.	No. of Staff Rated	Stability of Assessment Achieved by Each Superintendent Based on Two Observations of the Same Teacher Fourteen Days Apart Prior to Commencement of Rating in the Sample Schools				Reliability of Assessment Based on Correlation of Assessments of First Observer and Second Observer		
		Home	Stab.	Visiting	Stab.	Reliability Coeff. <sup>b</sup>		
		Supt.	Coeff. <sup>a</sup>	Supt.	Coeff. <sup>a</sup>	Xo	Yo	Zo
33	8	MM	.50	NN	.73	.87	.76	.93
34	9	MM	.50	NN	.73	.90	.75	.65
35	9	OO	.74	PP	.68	.93	.59	.66
36	10	B	.72	QQ	.87	.63	.56	.68
37	11	B	.72	RR	.74	.82	.71	.85
38	11	N	.62	SS	.57	.86	.63	.57
39	7	EE	.88	TT	.61	.21	.92	.29
40	5	EE	.88	UU	.59	.37	.83	.11
N=374		Medians: .80			.76	.70	.74	.73

<sup>a</sup> Pearson product moment correlations of the twenty-two items scored on each test run.

<sup>b</sup> Spearman-Brown estimate of reliability based on the correlation between the TCS Pattern scores for all teachers rated in each school.







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